

California State University San Marcos
Assurance #A4196-01
ANIMAL WELFARE ASSURANCE
In accordance with the PHS Policy for
Humane Care and Use of Laboratory Animals

I, Gerardo M. González, as named Institutional Official (IO) for animal care and use at California State University San Marcos 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, as well as field research performed by CSUSM researchers.

"Institution" includes the following branches and major components of California State University San Marcos: All components of the Institution, Colleges, Schools, Centers, etc., that are within the direct purview of the University President. All of the laboratory animal facilities components are located on, or in the immediate vicinity of, the University's Main Campus. There are no satellite facilities or other covered animal facilities.

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.

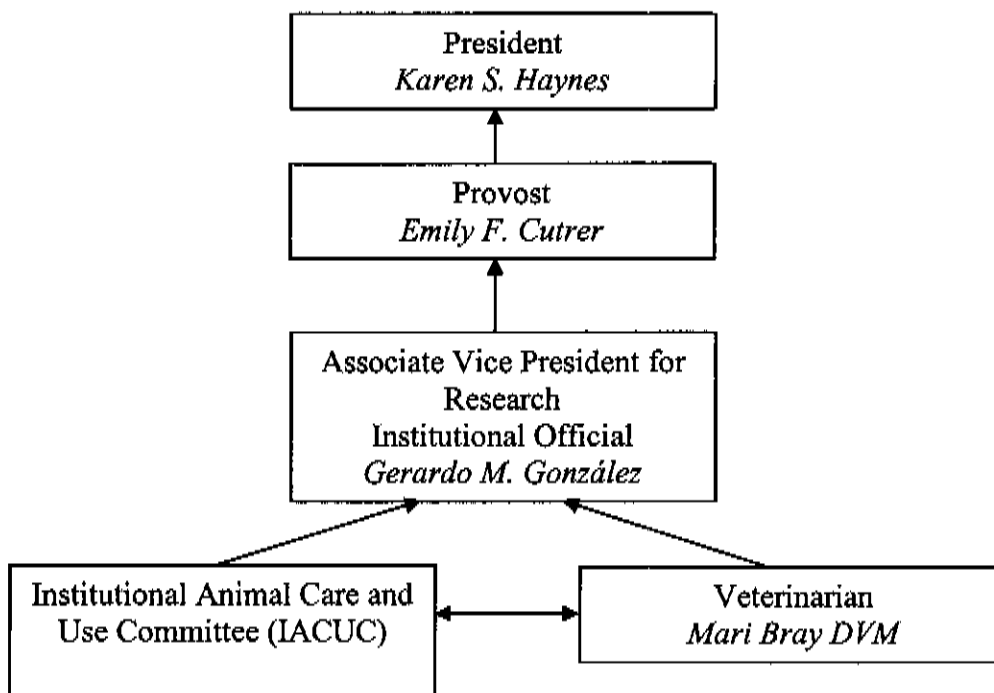
B. This Institution is guided by the "U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training."

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," hereinafter referred to as the "Guide".

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:



B. The qualifications, authority, and percent of time contributed by the veterinarian(s) who will participate in the program are as follows:

Name: Mari Bray

Qualifications:

- Degrees: DVM, DAACLAM
- Training and/or experience in laboratory animal medicine: Dr. Bray completed a three year post-doctoral residency in laboratory animal medicine at Yale University from 1989 through 1992 and has been practicing in this field since that time.

Authority: Dr. Bray has delegated program authority and responsibility for the Institution's animal care and use program. As such she has the authority and responsibility to implement the PHS Policy and the recommendations of the Guide. She has the responsibility of monitoring the operation of the animal facility. As consulting veterinarian, she provides professional services and expertise in maintaining research animals in optimal health, in treating animals in emergency medical situations, in periodical inspection of animals, animal quarters, and facility to assure continual compliance with the Animal Welfare Act and other established guidelines and programs for sanitation and maintenance, in general oversight of operations, practices and procedures of the animal facility, and in consultation with the scientists in the selection and utilization of animal models. She is responsible for providing guidance and recommendations in order to assure that the institutional animal care and use program meets or exceeds the requirements of the Animal Welfare Act, USDA Regulations, the PHS Policy, the NRC Guide for the Care and

Use of Laboratory Animals, and other applicable federal, state and local statutes and regulations relating to laboratory animals. She is on call 24 hours per day every day of the year, including weekends and holidays. She is responsible for providing for backup veterinary care for animal medical emergencies if she is unavailable due to illness or vacation.

Time Contributed to Program: Dr. Bray is present at the Institution an average of approximately 3 hours every 6 months, and if needed up to 1-2 hours other months. 100 percent of this time is contributed to the animal care and use program. In addition Dr. Bray contributes on average approximately 2 hours per month to the program while off-site reviewing protocols and providing consultation on various program related topics.

Name: Alice Smith

Qualifications:

- Degrees: DVM
- Training and/or experience in laboratory animal medicine: She has been working in this field for more than 15 years with all the species present at the Institution

Authority: Dr. Smith has delegated program authority and responsibility to implement the PHS Policy and the recommendations of the Guide.

Time Contributed to Program: As needed. *Back-up Veterinarian*

C. The Institutional Animal Care and Use Committee (IACUC) at this Institution is properly appointed in accordance with the PHS Policy IV.A.3.a and is qualified through the experience and expertise of its members to oversee the Institution's animal care and use program and facilities. The IACUC consists of at least five members, and its membership meets the composition requirements set forth in the PHS Policy, Section IV.A.3.b. Attached is a list of the chairperson and members of the IACUC and their names, degrees, profession, titles or specialties, and institutional affiliations (**Attachment A**).

D. The IACUC will:

1. Conduct semiannual program reviews as follows:
 - a) The IACUC will meet at least once every six months to review the Institutional Program for Humane Care and Use of Animals. The Committee uses the Guide and other pertinent resources, e.g., the PHS Policy, the Code of Federal Regulations (Animal Welfare) as a basis for the review.
 - b) To facilitate the evaluation, the Committee will use a checklist based on the Sample OLAW Program and Facility Review Checklist from the OLAW website. The evaluation will include, but not necessarily be limited to, a review of the following: a) IACUC Membership and Functions; b) IACUC Records and Reporting Requirements; c) Husbandry and Veterinary Care (all aspects); d) Personnel Qualifications (Experience and Training); and

- e) Occupational Health and Safety. In addition, the evaluation will include a review of the elements in the Institution's PHS Assurance.
 - c) If program deficiencies are noted during the review, they will be categorized as significant or minor and the Committee will develop a reasonable and specific plan and schedule for correcting each deficiency. A significant deficiency is one that is or may be a threat to the health and safety of the animals or personnel. No member will be involuntarily excluded from participating in any portion of the reviews.
2. Inspect at least once every six months all of the Institution's animal facilities, using the "Guide" as a basis for evaluation. The IACUC procedures for conducting semiannual facility inspections are as follows:
- a) At least once every six months the IACUC will visit all of the institute's facilities where animals are housed or used, i.e., holding areas, animal care support areas, storage areas, procedure areas, and laboratories where animal manipulations are conducted. Equipment used for transporting of the animals is also inspected. The Committee uses the Guide and other pertinent resources, e.g., the PHS Policy, as a basis for the review.
 - b) To facilitate the evaluation, the Committee will use a checklist based on the Sample OLAW Program and Facility Review Checklist from the OLAW website.
 - c) If deficiencies are noted during the inspection, they will be categorized as significant or minor and the Committee will develop a reasonable and specific plan and schedule for correcting each deficiency. A significant deficiency is one that is or may be a threat to the health and safety of the animals or personnel.
 - d) No member will be involuntarily excluded from participating in any portion of the inspections.
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 IACUC procedures for developing reports and submitting them to the Institutional Official are as follows:
- a) Individual IACUC members will convey their evaluations to the IACUC Chairperson who, in turn, will draft the reports, based on the OLAW Semiannual Report, and submit the reports to the Institutional Official.
 - b) The reports will contain a description of the nature and extent of the institution's adherence to the Guide and the PHS Policy, identify specifically any departures from the provisions of the Guide and the PHS Policy, and state the reasons for each departure. The reports will distinguish significant deficiencies from minor deficiencies. If program or facility deficiencies are noted, the reports will contain a reasonable and specific plan and schedule for correcting each deficiency. Copies of the draft reports will be reviewed, revised as appropriate, and approved by the Committee.
 - c) The final reports will be approved by a majority of the IACUC members and will include any minority opinions. The reports will be signed by at

least a majority of the IACUC members. If there are no minority opinions, the reports will reflect such. The completed reports will be submitted to the Institutional Official within 30 days following the evaluation.

4. Review concerns involving the care and use of animals at the Institution. The IACUC procedures for reviewing concerns are as follows:
 - a) Any individual may report concerns to the IO or any member of the IACUC. All reported concerns will be brought to the attention of the full Committee. If necessary the IACUC Chair will convene a meeting to discuss, investigate, and address any reported concern. Reported concerns and all associated IACUC actions will be recorded in the IACUC meeting minutes. The Committee will report such actions to the IO and, as warranted, to OLAW.
 - b) Notices are located in the animal facilities advising individuals how and where to report animal welfare concerns and stating that any individual who, in good faith, reports an animal welfare concern will be protected against reprisals according to the University Whistleblower policy.
5. Make written recommendations to the Institutional Official regarding any aspect of the Institution's animal program, facilities, or personnel training. The recommendations regarding any aspects of the institution's animal program or facilities are discussed and developed by the Committee. The Committee's recommendations are included in the IACUC Meeting minutes or a report of the IACUC's evaluations or a separate letter. Such documents are reviewed and approved by the Committee and then submitted to the IO.
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) Protocols are submitted to the IACUC Chair. Either a Full Committee Review (FCR) or Designated Member Review (DMR) may be used.
 - 1) If a DMR is to be used:
 - a. Prior to the review, each IACUC member will be provided with a written descriptions of activities (protocols) that involve the care and use of animals.
 - b. Any member of the IACUC may obtain, upon request, full committee review of those protocols.
 - c. If full-committee review (FCR) is not requested, at least one member of the IACUC, designated by the chairperson and qualified to conduct the review, will be assigned to review those protocols and have the authority to approve, require modifications in (to secure approval) or request full committee review of those protocols. If multiple designated reviewers are used, their decisions must be unanimous; if not, the protocol will be referred for FCR. If FCR is requested, approval of those

protocols may be granted only after review at a convened meeting of a quorum of the IACUC and with the approval vote of a majority of the quorum present.

- d. No member may participate in the IACUC review or approval of a protocol in which the member has a conflicting interest (e.g., is personally involved in the project) except to provide information requested by the IACUC.

2) If FCR is used:

- a. Prior to the review, each IACUC member will be provided with a written descriptions of activities (protocols) that involve the care and use of animals
- b. A quorum (majority of voting members) must be present at a convened meeting.
- c. A majority must vote to approve the protocol. Record of dissensions, abstentions, and minority opinions will be included in the minutes of the meeting.
- d. No member may participate in the IACUC review or approval of a protocol in which the member has a conflicting interest (e.g., is personally involved in the project) except to provide information requested by the IACUC; nor may a member who has a conflicting interest contribute to the constitution of a quorum.
- e. The IACUC may invite consultants to assist in reviewing complex issues. Consultants may not approve or withhold approval of an activity or vote with the IACUC unless they are also members of the IACUC.

Note: Any use of telecommunications will be in accordance with NIH Notice NOT-OD-06-052 of March 24th, 2006, entitled Guidance on Use of Telecommunications for IACUC Meetings under the PHS Policy on Humane Care and Use of Laboratory Animals.

- b) In order to approve, whether by DMR or FCR, proposed protocols or proposed significant changes in ongoing protocols, the IACUC will conduct a review of those components related to the care and use of animals and determine that the proposed protocols are in accordance with the PHS Policy. In making this determination, the IACUC will confirm that the protocol will be conducted in accordance with the Animal Welfare Act insofar as it applies to the activity, and that the protocol is consistent with the Guide unless acceptable justification for a departure is presented. Further, the IACUC shall determine that the protocol conforms to the institution's PHS Assurance and meets the following requirements per PHS IV.C.1a-g:

- 1) Procedures with animals will avoid or minimize discomfort, distress, and pain to the animals, consistent with sound research design.

- 2) Procedures that may cause more than momentary or slight pain or distress to the animals will be performed with appropriate sedation, analgesia, or anesthesia, unless the procedure is justified for scientific reasons in writing by the investigator.
 - 3) Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly killed at the end of the procedure or, if appropriate, during the procedure.
 - 4) The living conditions of animals will be appropriate for their species and contribute to their health and comfort. The housing, feeding, and nonmedical care of the animals will be directed by a veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied.
 - 5) Medical care for animals will be available and provided as necessary by a qualified veterinarian.
 - 6) Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures.
 - 7) Methods of euthanasia used will be consistent with the current recommendations of the American Veterinary Medical Association (AVMA) Panel on Euthanasia, unless a deviation is justified for scientific reasons in writing by the investigator.
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 IACUC procedures for reviewing proposed significant changes in ongoing research projects are handled in the same manner as new protocols. See Paragraph III.D.6. above.
 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: Principal Investigators are notified either by e-mail or letter from the IACUC Chairperson. The Institutional Official is notified by receiving a copy of the PI's notification letter and/or a copy of the IACUC meeting minutes.
 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: All ongoing activities are monitored

continuously by the animal care and use staff and the associated protocols are reviewed by a member or members of the IACUC at least annually. As part of the annual reviews, investigators are asked to provide a summary of activities and total number of animals used during the past year as well as any problems that were encountered. Annual protocol reviews are recorded in the IACUC meeting minutes. The IACUC meeting minutes are reviewed and approved by the Committee.

Protocols are approved for a maximum of 36 months. That is, all protocols expire no later than the three-year anniversary of the initial IACUC review. If activities will continue beyond the expiration date, a new protocol must be submitted, reviewed, and approved as described in Paragraph III.D.6 above.

10. 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: The IACUC may suspend an activity that it previously approved if it determines that the activity is not being conducted in accordance with applicable provisions of the Animal Welfare Act, the Guide, the institution's Assurance, or IV.C.1.a.-g (6.b above). of the PHS Policy. The IACUC may suspend an activity only after review of the matter at a convened meeting of a quorum of the IACUC and with the suspension vote of a majority of the quorum present. If the IACUC suspends an activity involving animals the Institutional Official in consultation with the IACUC shall review the reasons for suspension, take appropriate corrective action, and report that action with a full explanation to OLAW.

Suspensions, whether temporary or permanent, will be reported to OLAW in accordance with NIH Notice of February 24, 2005, NOT-OD-05-034 Guidance on Prompt Reporting to OLAW under the PHS Policy on Humane Care and Use of Laboratory Animals

- E. The occupational health and safety program for personnel who work in laboratory animal facilities or have frequent contact with animals has been established by the CSUSM Risk Management and Safety Office. Medical Monitoring will be provided to personnel whose exposure qualifies them to be integrated into the program and per the request of the Principal Investigator/Supervisor. Services will also be offered to faculty, staff and student employees per the criteria of the medical monitoring program. Among the greatest health and safety risks for personnel with frequent exposure to animals is the development of allergies to animal urinary proteins. CSUSM has implemented procedures to minimize these types of risks.

The program includes, but is not limited to, the following:

1. Physical Examination (Pre-employment, Annual and Prior to Termination, if deemed appropriate per the risk assessment and by request of the principal investigator or supervisor)
2. Tetanus immunization (every 10 years by request of the principal investigator or supervisor)

3. Education for employees regarding allergies, zoonoses, personal hygiene and the handling of hazardous agents will be provided by the Veterinarian and/or the senior scientist prior to engaging in work that involves contact with such agents. Refresher education regarding zoonoses and personal hygiene will be offered by the Veterinarian or a trained surrogate at least once annually. This training must be documented by the trainer and retained by the Risk Management and Safety Office.
 4. Injuries and allergies shall be reported to the individual's supervisor and to the CSUSM Risk Management and Safety Office, who will respond to the incident as appropriate.
- 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 Facility and Species Inventory table (**Attachment B**).
- G. The training or instruction available to scientists, animal technicians, and other personnel involved in animal care, treatment, or use is as follows:
1. **IACUC Members** - Each IACUC member will be provided with each of the following the following documents:
 - a) PHS Policy for the Humane Care and Use of Laboratory Animals,
 - b) The National Research Council (NRC) Guide for the Care and Use of Laboratory Animals,
 - c) A copy of the ARENA/OLAW IACUC Guidebook,
 - d) A copy of this Assurance.All members of the IACUC will complete the Essentials for IACUC Members Curriculum located at the Collaborative Institutional Training Initiative website, www.citiprogram.org. Continuing education will be available; IACUC members will complete CE/refresher training at least once every three years. Documentation of training will be maintained for at least three (3) years.
 2. **Animal Care and Use Personnel** – The training or instruction available to scientists, animal technicians, and other personnel involved in animal care, treatment, or use is as follows: Personnel performing procedures using animals must be identified in the Institutional Animal Care and Use Protocol. A description of each individual's qualifications, experience and/or training must be provided. Any person needing additional protocol-specific training will be identified during the review process and such required training will be a condition of approval of the protocol.

All persons involved in animal care and use will be trained by the IACUC veterinarian, or other qualified individual(s). The training will cover the laws and regulations covering laboratory animal care and use with an emphasis on the contents of the NRC Guide and the 3R's (Replacement alternatives, Reduction alternatives, and Refinement alternatives). The training will include instruction on research or testing methods that minimize the numbers of animals required to obtain valid results and limit animal pain or distress as

well as other training and instruction requirements delineated in 9 CFR, Part 2, Subpart C, Section 2.32(c) as follows:

Training and instruction shall be made available, and the qualifications of personnel reviewed, with sufficient frequency to fulfill the research facility's responsibilities under 9CFR2.32c and 2.31 and the PHS Policy for the Humane Care and Use of Laboratory Animals.

- a) Human methods of animal maintenance and experimentation, including:
 - 1) The basic needs of each species of animal;
 - 2) Proper handling and care for the various species of animals used by the facility;
 - 3) Proper pre-procedural and post-procedural care of animals; and
 - 4) Aseptic surgical methods and procedures
- b) The concept, availability, and use of research or testing methods that limit the use of animals or minimize animal distress;
- c) Proper use of anesthetics, analgesics, and tranquilizers for any species of animals used by the facility;
- d) Methods whereby deficiencies in animal care and treatment are reported, including deficiencies in animal care and treatment reported by any employee of the facility. No facility employee, Committee member, or laboratory personnel shall be discriminated against or be subject to any reprisal for reporting violations of any regulation or standards under the Act;
- e) Utilization of services available to provide information:
 - 1) On appropriate methods of animal care and use;
 - 2) On alternatives to the use of live animals in research;
 - 3) That could prevent unintended and unnecessary duplication of research involving animals; and
 - 4) Regarding the intent and requirements of the Act.

Continuing education requirements will be determined by the Principal Investigator and/or IACUC on a case-by-case basis. However, all personnel involved in animal care and use will complete CE/refresher training at least once every three years.

On-line training may be used and accepted in lieu in-house training. However, a principal investigator must ensure that all collaborating researchers are properly trained in the specific research methods for a study regardless of whether on-line training is available. Any use of on-line training to fulfill training requirements must be approved by the IACUC. Approval and completion of on-line training will be documented.

Training in experimental methods, i.e., specific animal manipulations and techniques, will be conducted based on the types of research being conducted at the institution.

Note: For investigators transferring from other facilities at which they have received similar training, verification of previous training may be accepted in lieu some Cal State San Marcos training. Acceptance of previous training in lieu of the Institution's training is solely at the IACUC's discretion.

Documentation - Documentation of all training will be maintained for at least three (3) years and available to OLAW upon request.

IV. INSTITUTIONAL PROGRAM EVALUATION AND ACCREDITATION

All of this Institution's programs and 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). 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 (**Attachment C**).

V. RECORDKEEPING REQUIREMENTS

- A. This Institution will maintain for at least three years:
 - 1. 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, Gerardo M. González, Associate Vice President for Research.

- 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. After the end of the reporting period, the IACUC, through the Institutional Official, will submit an annual report to OLAW no later than January 31 of 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, Gerardo M. González, Associate Vice President for Research.

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: Gerardo M. González

Title: Associate Vice President for Research

Name of Institution:

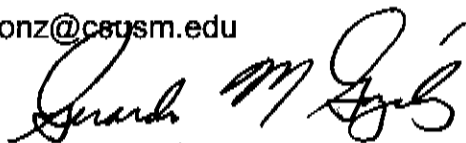
Address: California State University San Marcos
333. South Twin Oaks Valley Road
San Marcos, Ca 92096

Phone: 760.750.4066

Fax: 760.750.3150

E-mail: ggonz@csusm.edu

Signature:



Date:

7/30/08

B. PHS Approving Official

Name:

Title:

Address:

Phone:

Fax:

E-mail:

Signature:

Date:

C. Effective Date of Assurance:

D. Expiration Date of Assurance:

MEMBERSHIP OF THE INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

DATE: June 2, 2008

NAME OF INSTITUTION: California State University San Marcos

ASSURANCE NUMBER: A4196-01

Chairperson Name, Title, and Degree/Credentials		Business Address, Phone, Fax, and Email of Chairperson	
Name*: Richard Bray	Address*: 333 S. Twin Oaks Valley Rd., San Marcos, CA 92096-0001		
Title*: Professor, Biological Science			

Degree/credentials*: Ph.D.	Phone*: 760-750-4175	Fax*: 760-750-3150	Email*: rbray@csusm.edu
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Name of Member/Code**	Degree/Credentials	Position Title	PHS Policy Requirements***
Mari Bray, (V)	DVM	Veterinarian	Veterinarian
Nancy Caine, (S)	Ph.D.	Professor, Psychology	Scientist
Brian Norris, (S)	Ph.D.	Professor, Biological Science	Scientist
Keith Trujillo, (S)	Ph.D.	Professor, Psychology	Scientist
Philip Meengs (NA,NS)	J.D.	Retired Attorney	Non-affiliated, Non-scientist
Regina Frasca (NS)	B.S.	Director, Risk Management & Safety	Non-Scientist

*This information is mandatory.

**Names of members, other than the chairperson and veterinarian, may be represented by a number or symbol in this submission to OLAW. Sufficient information to determine that all appointees are appropriately qualified must be provided and the identity of each member must be readily ascertainable by the Institution and available to authorized OLAW or other PHS representatives upon request.

***PHS Policy Requirements - identify which IACUC members meet the four criteria below:

- Veterinarian (V) - a veterinarian with direct or delegated program responsibility.
- Scientist (S) - a practicing scientist experienced in research involving animals.
- Nonscientist (NS) - a member whose primary concerns are in non-scientific areas (e.g. ethicist, lawyer, member of the clergy).
- Nonaffiliated (NA) - a member who is not affiliated with the Institution in any way other than as a member of the IACUC, and who is not a member of the immediate family of a person who is affiliated. This member is expected to represent the interests of the general community in the proper care and use of animals and should not be a laboratory animal user. A consulting attending veterinarian may not be considered nonaffiliated.

Notes:

1. All members must be appointed by the CEO (or individual with specific written delegation to appoint members) and must be voting members. Ad hoc or nonvoting members may be listed and identified as such, but are not considered members for the purpose of the PHS Policy, and do not contribute to a quorum.
2. If Alternate members are listed, identify for whom (by name or code number, not specialty) they will serve as Alternates.

OTHER KEY CONTACTS (OPTIONAL)

If there are other individuals within the Institution who may be contacted regarding this Assurance, please provide information below.

Name: Richard Bray
Title: IACUC Chair
Phone & Fax: 760-750-4175
E-mail: rbray@csusm.edu

Name: Linda Collins
Title: Administrative Support Coordinator
Phone & Fax: 760-750-4066/760-750-3150
E-mail: lcollins@csusm.edu

FACILITY AND SPECIES INVENTORY

DATE: June 2, 2008

NAME OF INSTITUTION: California State University San Marcos

ASSURANCE NUMBER: A4196-01

Laboratory, Unit, or Building*	Gross Square Feet (including service areas)	Species Housed in Unit (use complete common names)	Approx. Average Daily Inventory
SCI I - 216 (utilities)	95	None	
SCI I - 216A (vivarium)	125	Laboratory rat	60 rats
SCI I - 216B (vivarium)	60	Cactus mouse, spiny mouse, laboratory mouse	10 cactus, 35 spiny, 80 lab mice
SCI I - 216C	50		
SCI I - 217 (cage washer)	360	None	
SCI I - 219 (storage)	63	None	
Vivarium Foyer	150	None	
SCI I - 204	145	Laboratory rat	temporary**
SCI I - 311 (Metabolism lab)	112	Bearded dragon	temporary**
SCI I - 313 (Kristani/Spady lab)	1313	Spiny mouse, cactus mouse, laboratory mouse	temporary**
SCI I - 306 (Brown lab)***	286	Bearded dragon	25
Total Square Feet	2759		

** Animals are moved to these labs for experiments, then may be returned to the vivarium

*** Holding facility for lizards between 5/08 to 8/09.

7/16/08

**CSUSM SEMIANNUAL PROGRAM REVIEW CHECKLIST: INSTITUTIONAL
POLICIES AND RESPONSIBILITIES**

In the spaces preceding each statement, indicate compliance with a "Y" (yes) or "N" (no).
Elaborate at the end of the form on each "N" given.

IACUC MEMBERSHIP AND FUNCTIONS

- At least 5 members, appointed by Institutional Official
- Members include veterinarian, scientist, non-scientist, and non-affiliated/non-lab animal user
- Responsible for oversight and evaluation of institution's program
- Reports to Institutional Official
- Conducts semiannual evaluations of institutional animal care and use program
- Conducts semiannual inspections of institutional animal facilities
- Will review and investigate concerns about animal care and use at institution
- Has procedures for review, approval and suspension of animal activities
- Has procedures for review and approval of significant changes to approved activities
- Has policies for special procedures (restraint, multiple survival surgery, fluid/diet restriction)

IACUC RECORDS AND REPORTING REQUIREMENTS

Reports to Institutional Official:

- Semiannual program reviews and facility inspections, including minority IACUC views
- Describes departures from Guide or PHS Policy and reasons for departure
- Distinguishes significant from minor deficiencies
- Includes plan and schedule for correction of each deficiency identified

Reports to OLAW/USDA:

- Reports include any minority IACUC views in relation to semiannual reviews
- Annual report to OLAW documents program changes and dates of IACUC semiannual review
- Promptly advises OLAW of serious/ongoing Guide deviations or PHS Policy noncompliance
- Promptly advises OLAW of any suspension of activity by the IACUC
- Reporting mechanism in place for IACUC-approved exceptions to regulations and standards
- Reports, within 15 days, failure to adhere to timetable for correction of deficiencies
- Reports suspension of activity by the IACUC to USDA (covered species only) and any federal funding agency

Records:

- Minutes of IACUC meetings and semiannual reports maintained for 3 years
- IACUC review documentation maintained for 3 years after end of study
- IACUC review of activities involving animals includes all required information

VETERINARY CARE

- Institutional arrangement for veterinarian with training or experience in lab animal medicine
- Veterinary access to all animals
- Provision for backup veterinary care
- Veterinarian provides guidance on handling, immobilization, sedation, analgesia, anesthesia, euthanasia
- Veterinarian provides guidance/oversight on surgery programs and oversight of post-surgical care
- Veterinary authority to oversee all aspects of animal care and use
- Evaluation of animal vendors
- Procedures for lawful animal procurement, evaluation of animals, and transport
- Procedures for stabilization
- Policies on separation by species, source, health status
- Policies for isolation of sick animals
- Program of surveillance, diagnosis, treatment, and control of disease
- Availability of diagnostic resources for preventive health program
- Provision for emergency, weekend, and holiday veterinary care

SURGERY

- Procedures for monitoring surgical anesthesia and analgesia
- Pre-surgical plan (identify space, supplies, conduct pre-op exam, define post-op care)
- Appropriate training or experience of personnel in surgery and anesthesia
- Major procedures distinguished from minor
- Use of effective aseptic procedures for survival surgery
- Implemented procedures for using/scavenging volatile anesthetics
- Effective procedures for sterilizing instruments and monitoring expiration dates on sterile packs
- Documentation of post-operative monitoring and care

PAIN, DISTRESS, ANALGESIA, AND ANESTHESIA

- Guidelines for assessment and categorization of pain
- Guidelines for avoiding unnecessary pain and distress
- Appropriate anesthetics, analgesics, tranquilizers used for each species
- Special precautions for the use of paralytics
- Veterinary input in the choice of drugs

EUTHANASIA

- Compliance with current AVMA Panel on Euthanasia unless approved by the IACUC
- Guidance provided on appropriate methods for each species
- Training available for personnel in humane methods of euthanasia

DRUG STORAGE AND CONTROL

- Safe, secure, storage arrangement
- Record keeping meets regulations

PERSONNEL QUALIFICATIONS AND TRAINING

- Institution has established and implemented an effective training program
 - Includes professional/management/supervisory personnel
 - Includes animal care personnel
 - Includes research investigators, instructors, technicians, trainees, students
- Training program content includes:
- Humane practices of animal care (housing, husbandry, handling, etc.)
 - Humane practices of animal use (research procedures, use of anesthesia, pre/post op care, etc.)
 - Research/testing methods that minimize numbers necessary to obtain valid results
 - Research/testing methods that minimize animal pain or distress
 - Use of hazardous agents, including access to OSHA chemical hazard notices where applicable

OCCUPATIONAL HEALTH AND SAFETY PERSONNEL

Institutional program for a safe and healthy workplace:

- Program is established and implemented
- Covers all personnel who work in laboratory animal facilities
- Based on hazard identification and risk assessment
- Personnel training (pregnancy/illness/immunosuppression precautions, zoonoses, hazards)
- Personal hygiene procedures (work clothing, eating/drinking/smoking policies)
- Procedures for use, storage and disposal of hazardous biologic, chemical, and physical agents
- Specific procedures for personnel protection (shower/change facilities, injury prevention)

Program for medical evaluation and preventive medicine for personnel:

- Pre-employment evaluation including health history
- Immunizations as appropriate (rabies, tetanus, etc.) and tests
- Zoonosis surveillance as appropriate (Q-fever, tularemia, Hantavirus, plague, etc.)

Explain any "No" responses here. Attach a separate sheet if necessary.

Date 16 July 2008

Signature of IACUC Chair



7/16/08

CSUSM SEMIANNUAL FACILITY INSPECTION CHECKLIST
Science Hall

Please address the following criteria (yes or no) and explain any deficiencies below:

a. vivarium and clean storage rooms and SCI1-306

Location:

- yes
- are animal areas separate from personnel areas?
 - is there separation of species?
 - is there separation by disease status?

Construction:

- yes
- are corridors, doors, windows, floors, drainage, walls, ceilings, HVAC, power and lighting clean and in good operating order?

Room/cage:

- yes
- is temperature, humidity, ventilation, illumination, noise control appropriate and/or sufficient?

Behavioral management:

- yes
- is there adequate/appropriate environmental enrichment, social grouping, animal activity?

Food:

- yes
- are the feeding schedule and procedures appropriate?
 - is the food free from contamination and vermin and stored in sealed containers?
 - is the food labeled for expiration date and rotated according to stock numbers?

Water:

- yes
- given ad libitum unless justified?

Bedding:

- yes
- is bedding species appropriate and effective?
 - is bedding changed frequently enough?
 - is bedding stored appropriately?

Sanitation:

- yes
- are facilities and equipment cleaned, disinfected, and monitored for sanitation?

Waste disposal:

- yes
- are there adequate procedures followed for collection, storage and disposal of waste, including hazardous waste and animal carcasses?

Pest control:

- yes
- is there a program that includes control of rodent pests and insecticide use?

Emergency, weekend, and holiday animal care:

yes

- is there provision for routine and veterinary care every day?
- is there accessible contact information?
- are backup systems monitored?

Animal identification and records:

yes

- are cage/rack cards up to date and accessible?
- are records complete and accurate?

Storage:

yes

- in addition to food and bedding, are other items stored appropriately?

b. Cage wash room

Construction:

yes

- are doors, windows, floors, drainage, walls, ceilings in good repair?
- is there convenient access to animal areas/waste disposal?
- is there ease of access (including door size) to facilitate use?
- is there sufficient space for workload?

Safety:

yes

- are there safety precautions/clothing/equipment used for bedding disposal/prewash/acid wash?
- does ventilation meet heat and humidity load and *Guide* requirements?

Function and use:

yes

- is traffic flow clean to dirty with no contamination of clean equipment by dirty equipment?
- are utilities appropriate?
- are cage wash temperatures monitored and are records available?
- is clean cage storage appropriate?

c. Animal testing room

(SC11-204, 311, 313)

Need something from
MFG re: separate all

yes

- are the functional components (surgical support, animal preparation, operating area, postoperative recovery) separated (physically or otherwise) according to the *Guide*?
- does HVAC system meet *Guide* requirements?
- is there appropriate drug storage, control, expiration date monitoring?
- are there adequate records of anesthesia and perioperative care?
- are aseptic procedures in use for all survival surgeries?
- is area clean and uncluttered, not used for anything else during surgery?
- are surfaces smooth and impervious to moisture?
- are sterilized materials stored correctly?
- are animals monitored during postoperative recovery?

Explanation of deficiencies

Describe the location and nature of any minor deficiencies. Where deficiencies are noted, indicate the date by which the deficiency must be remedied, and the person responsible for remediation.

Sci 7313 Food cooler - 2 barrels w/ mfd date 1/2/08 - 26 months old. need letter from vendor that it is still good and for how long in these conditions, or list card
other food in bags - no mfd or exp. date.

Describe the location and nature of any major deficiencies. Where deficiencies are noted, indicate the date by which the deficiency must be remedied, and the person responsible for remediation.

IACUC Chair signature



Date 16 July 2008