



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH

FOR US POSTAL SERVICE DELIVERY:

Office of Laboratory Animal Welfare  
6700B Rockledge Drive, Suite 2500, MSC 6910  
Bethesda, Maryland 20892-6910  
Home Page: <http://grants.nih.gov/grants/olaw/olaw.htm>

FOR EXPRESS MAIL:

Office of Laboratory Animal Welfare  
6700B Rockledge Drive, Suite 2500  
Bethesda, Maryland 20817  
Telephone: (301) 496-7163  
Facsimile: (301) 402-7065

October 31, 2018

Re: Animal Welfare Assurance  
#A3518-01 [OLAW Case 1R]

Randolph W. Hall, Ph.D.  
Vice Provost of Research  
University of Southern California  
3720 South Flower St., Room [REDACTED]  
Los Angeles, CA 90089-0706

Dear Dr. Hall,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your October 15, 2018 letter, received in our office October 29, 2018, reporting a noncompliance with the PHS Policy on the Humane Care and Use of Laboratory Animals at the University of Southern California. Your letter supplements the information provided in the initial telephone report from Dr. Casebolt on May 31, 2018. According to the information provided it is understood that subsequent to a March 26, 2018 anonymous report it was determined that between six and nine mice had been anesthetized for thoracotomies by laboratory staff members using free-drop isoflurane anesthesia. The required anesthesia was ketamine and xylazine overdose. One mouse had recovered from the isoflurane anesthesia mid-surgery with its chest cavity exposed. The lab member also admitted to not providing consistent analgesia after all survival surgeries. The related protocol was not supported by PHS or NSF funds.

The PI was required to submit a plan to prevent future noncompliance in the laboratory. All individuals performing surgery must undergo surgery and anesthesia training. The responsible individual was not allowed to perform animal work for three months and upon completion of training, was allowed to perform the work only under direct supervision for an additional three months. The protocol was also amended.

OLAW appreciates the consideration of these matters by the University of Southern California, which was consistent with the philosophy of institutional self-regulation. Based on the information provided, OLAW is satisfied that appropriate actions have been taken to investigate these incidents, correct the non-compliances, and prevent recurrence. OLAW concurs that the incidents warranted reporting. We appreciate being informed of these matters and find no cause for further action by this office.

Sincerely,

(b) (6)

Brent C. Morse, DVM  
Director  
Division of Compliance Oversight  
Office of Laboratory Animal Welfare

cc: IACUC Contact



October 15, 2018

Brent Morse, D.V.M.  
Director, Division of Compliance Oversight  
Office of Laboratory Animal Welfare  
National Institutes of Health  
RKL1, Suite 360, MSC 7982  
6705 Rockledge Drive  
Bethesda, MD 20892-7982

Dear Dr. Morse:

This is to report noncompliance of animal use activities by the IACUC at the University of Southern California (animal welfare assurance number D16-00320/A3518-01). Dr. Donald Casebolt provided a preliminary report to you on May 31, 2018. The IACUC protocol for this work was not associated with Public Health Service or National Science Foundation funding.

Laboratory staff members performed thoracotomies on between six and nine mice using free-drop isoflurane anesthesia and one mouse recovered mid-surgery with its chest cavity exposed. This incident was reported to Department of Animal Resources Office via an anonymous report on March 26, 2018. The incident was verified in a meeting with a clinical veterinarian where the member also admitted not providing consistent analgesia after all survival surgeries. Free drop anesthesia was not permitted at USC without IACUC approval and furthermore, the thoracotomy with transcatheter perfusion was approved in the protocol to be performed under ketamine and xylazine overdose.

The following corrective actions were taken by the IACUC with respect to these incidents:

The IACUC reviewed the incidents at its April 25, 2018 meeting of a full committee with a quorum in attendance. The committee voted that all individuals performing surgery must undergo Level 4 Surgery and Anesthesia training with a DAR veterinarian. The laboratory member who was responsible for the incident was not allowed to perform animal work for a period of three months and was required complete all rodent training before resuming live animal research. Upon completion of training, the staff member was allowed to carry out any work on animals only in the presence of the Principal Investigator or other designated laboratory member for an additional three months. The IACUC also required a written response from the principal investigator with a plan to prevent future noncompliance in the laboratory.

The Principal Investigator provided a complete response to all of the required items with initial corrective action plan on May 8, 2018 and this was discussed at the full

IACUC meeting on May 23, 2018. The final written response from the principal investigator, protocol amendment, and training documentation for the staff members were reviewed at the full IACUC meeting on July 25, 2018. The response was complete and deemed acceptable by the committee. To date there have been no other instances of noncompliance in this Principal Investigator's laboratory.

Should you have any questions about these incidents or the corrective actions outlined above, please contact Dr. Donald Casebolt at (b) (6)

Sincerely,

(b) (6)

Randolph W. Hall, Ph.D.  
Vice President of Research

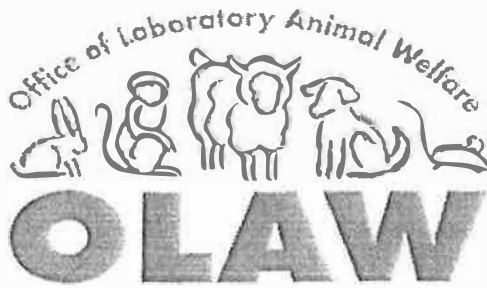
CC: Dr. Brett Lund  
Dr. Donald Casebolt

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## Initial Report of Noncompliance

By: *[Signature]*

Date: 5/31/18

Time: 3:30

Name of Person reporting: Don Casebolt, DVM, AV

Telephone #: (b) (6)

Fax #:

Email:

Name of Institution: Univ. of So. Cal (usc)

Assurance number: A3518

Did incident involve PHS funded activity? No

Funding component: \_\_\_\_\_

Was funding component contacted (if necessary): \_\_\_\_\_

What happened? Anonymous report. Mice anesthetized w/ isoflurane instead of Ket/Xyl. as required by protocol for perfusion. Mice may have been waking-up.

Species involved: mice

Personnel involved: lab staff

Dates and times: 3/26/18 (complaint received)

Animal deaths:

Possible improper euthanasia

Projected plan and schedule for correction/prevention (if known): \_\_\_\_\_

Retraining + probationary period (3 mos?)

Projected submission to OLAW of final report from Institutional Official:

OFFICE USE ONLY

Case # \_\_\_\_\_



Division of Compliance Oversight

Record of Call for Case # A3518-1R

| Date & Time     | Message  | Initials |
|-----------------|--|----------|
| 7/31/18<br>2:20 | Spoke w/ Dr. Casebolt. IACUC met on 7/25/18. Final letter to be sent soon. | mgm      |
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