



DEPARTMENT OF HEALTH & HUMAN SERVICES

PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH

FOR US POSTAL SERVICE DELIVERY:

Office of Laboratory Animal Welfare  
Rockledge One, Suite 360  
6705 Rockledge Drive – MSC 7982  
Bethesda, Maryland 20892-7982  
Home Page: <http://grants.nih.gov/grants/olaw/olaw.htm>

FOR EXPRESS MAIL:

Office of Laboratory Animal Welfare  
Rockledge One, Suite 360  
6705 Rockledge Drive  
Bethesda, Maryland 20817  
Telephone: (301) 496-7163  
Facsimile: (301) 402-7065

August 10, 2017

Re: Animal Welfare Assurance  
A3317-01 [OLAW Case D]

Dr. Paul Horn  
Senior Vice Provost for Research  
New York University  
70 South Washington Square South  
New York, NY 10012

Dear Dr. Horn,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your August 2, 2017 letter reporting an adverse event involving zebrafish at New York University, following up on an initial telephone report on July 25, 2017. According to the information provided, OLAW understands that 146 newly received zebrafish died within ten days of arrival or were euthanized. The water quality at the institution was within normal limits.

The corrective actions consisted of performing necropsies which revealed mycobacterial and other bacterial infection. All fish were euthanized and the tanks cleaned with bleach and rinsed. The vendor will no longer be used and other vendor shipments will be evaluated annually including PCR and histopathology examination of specimens. The fish were supported by NSF grants #CMMI-1433670 and CMMI-1505832.

Based on its assessment of this explanation, OLAW understands that measures have been implemented to correct and prevent recurrence of this problem. OLAW concurs with the actions taken by the institution to comply with the PHS Policy on Humane Care and Use of Laboratory Animals.

Sincerely,

Axel Wolff, M.S., D.V.M.  
Director  
Division of Compliance Oversight

cc: IACUC Chair  
Edda Thiels, NSF Animal Welfare Officer



PAUL HORN  
*Distinguished Scientist in Residence*  
*Senior Vice Provost for Research*  
Office of the Provost

Office of the Provost  
Elmer Holmes Bobst Library  
70 Washington Square South, Room 1228  
New York, New York 10012-1091

P: 212 998 3228  
F: 212 995 4300  
paul.horn@nyu.edu

August 2, 2017

Axel Wolff, DVM  
Director, Division of Compliance Oversight  
Office of Laboratory Animal Welfare  
National Institutes of Health  
Rockledge 1, Suite 360  
6705 Rockledge Drive  
Bethesda, MD 20892

Dear Dr. Wolff:

New York University, in accordance with Assurance A3317-01 and PHS Policy IV.F.3., provides this report of an adverse event not of the making of New York University veterinary or research staff. Deaths associated with this adverse event were due to diseases present in the vendor colony and arrived with shipment of fish to NYU. On May 19<sup>th</sup> of 2017, zebrafish were received from an approved vendor for the Principal Investigator's (PI) IACUC approved animal use protocol, entitled "Robotics based experimental paradigms to study social behavior, reward pathways and their development adjustments in fish." This protocol is supported by NSF grants **"Causal Relationships Underlying the Collective Dynamic Behavior of Swarms"**; Funding source: NSF grant; Award# CMMI-1433670 and **"CDS&E: Modeling the Zebrafish Model Organism Toward Reducing, Refining, and Replacing Animal Experiments"**, Funding source: NSF grant; Award# CMMI- 1505832. This incident was first reported to Dr. Axel Wolff, OLAW, on July 25, 2017 via a telephone call by Gordon Roble, DVM, DACLAM, Associate Director, Office of Veterinary Resources.

On May 26<sup>th</sup>, 2017, the Office of Veterinary Resources received information that recently received fish (May 19<sup>th</sup>) had shown unexpected high mortality over the past week. From the shipment of 230 zebrafish, 5 fish were dead on arrival which is a relatively expected percentage. All remaining fish were introduced into clean quarantine tanks in accordance with SOP. Quarantine tank water parameters were within normal limits and had been conditioned in the weeks prior to arrival of the fish. No other fish had been present in tanks after disinfection and conditioning. On the following day, May 20<sup>th</sup>, fish began to die. Two tanks were mainly affected. All water condition parameters were within normal limits in accordance with protocol guidelines. Evidence of presumptive fin rot was noted in fish in one of these tanks and treatment started with nitrofurantoin on 5/21. The second tank had fish with clinical signs consistent with sepsis due to bacterial infection or egg binding. These fish were immediately euthanized and a representative sample submitted for histopathology and PCR evaluation. Over the next 10 days, 141 fish died or were euthanized as clinical signs such as changes in fin appearance or bloating were noted. On June 8<sup>th</sup>, initial histopathology results consistent with mycobacterium were found and the remaining fish were euthanized regardless of clinical appearance. The tanks were cleaned with bleach and rinsed thoroughly. PCR results confirmed *Edwardsiella ictaluri*, *Mycobacterium marinum*, *Myxidium streisingeri*, *Pseudocapillaria tomentosa*, and *Pseudoloma neurophilia* infections.

To address the situation, the following corrective actions were taken including:

- 1) Euthanasia of potentially infected fish
- 2) Histopathologic and PCR analysis of known infected fish to confirm diagnosis
- 3) Elimination of this vendor as an approved vendor
- 4) Re-evaluation of vendors supplying fish to include PCR and histopathology evaluation of sample fish on an annual basis.

At their meeting on July 18, 2017 the University Animal Welfare Committee reviewed and accepted the corrective action plan as submitted by the PI and veterinary staff.

New York University is committed to protecting the welfare of animals used in research and appreciates the guidance and assistance provided by OLAW in this regard. Should you have any questions regarding this report, please contact my office.

Thank you for your consideration of this matter.

Sincerely,



Paul Horn  
*Institutional Official*  
*Senior Vice Provost for Research*  
Office of the Provost  
Elmer Holmes Bobst Library  
70 Washington Square South, Room #  
New York, New York 10012-1091

P: Phone Number

F: Phone Number

paul.horn@nyu.edu

## Morse, Brent (NIH/OD) [E]

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**From:** OLAW Division of Compliance Oversight (NIH/OD)  
**Sent:** Thursday, August 03, 2017 11:09 AM  
**To:** Secondary Individual@nyu.edu; OLAW Division of Compliance Oversight (NIH/OD)  
**Cc:** Secondary Individual; Secondary Individual; Secondary Individual  
**Subject:** RE: Adverse Event Report - Revised

Thank you for this follow-up. I will make sure Dr. Wolff receives this version for his response letter.

Sincerely, Brent Morse

Brent C. Morse, DVM, DACLAM  
Animal Welfare Program Specialist  
Division of Compliance Oversight  
Office of Laboratory Animal Welfare  
National Institutes of Health

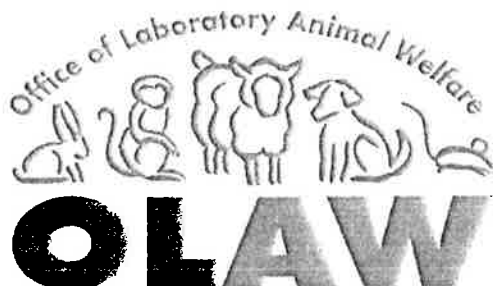
Please note that this message and any of its attachments are intended for the named recipient(s) only and may contain confidential, protected or privileged information that should not be distributed to unauthorized individuals. If you have received this message in error, please contact the sender.

**From:** Secondary Individual [mailto:Secondary Individual@nyu.edu]  
**Sent:** Thursday, August 03, 2017 10:57 AM  
**To:** OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>  
**Cc:** Secondary Individual@nyu.edu; Secondary Individual@nyu.edu; Secondary Individual@nyu.edu  
**Subject:** Adverse Event Report - Revised

Dear Dr. Wolff,  
The attached report contains minor edits from the version sent last night. Our apologies for any confusion.  
Please review **\*this\*** version of the adverse event report for New York University.

Thank you very much,  
Secondary Individual

Associate Director, UAWC  
Office of Research Compliance  
New York University  
665 Broadway, Room #  
New York, NY 10012  
P: Phone Number  
F: Phone Number



## Initial Report of Noncompliance

By: *aw*

Date: *7/25/17*

Time: *10:00*

Name of Person reporting: Secondary Individual

Telephone #:

Phone Number

Fax #:

Email:

Name of Institution: *New York University*

Assurance number: *A3317*

Did incident involve PHS funded activity? *NSF*

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

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

What happened?

*200+ zebrafish died from bacterial infection from vendor  
Authorized remainder*

Species involved: *zebrafish*

Personnel involved:

Dates and times:

Animal deaths:

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

*Change vendor*

Projected submission to OLAW of final report from Institutional Official:

OFFICE USE ONLY

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