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
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November 21, 2017

Re: Animal Welfare Assurance
A3224-01 [OLAW Case 1M]

Dr. John Bixby
Vice Provost for Research
Miller School of Medicine-Vice Provost for Research
University of Miami
1400 N.W. 10th Avenue – Room # Dominion Tower
Miami, Florida 33136

Dear Dr. Bixby,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your November 15, 2017 letter reporting an adverse event impacting fish at the University of Miami, following up on an initial telephone report on September 22, 2017. According to the information provided, OLAW understands that the impact of Hurricane Irma on September 11, 2017 caused fish deaths at the Rosenstiel School of Marine and Atmospheric Sciences (RSMAS) outdoor facility and at the Coral Gables Campus zebrafish facility. At RSMAS, fish mortalities consisted of the following: 50 juvenile cobia, 35 grouper, 1 adult cobia, and 5 juvenile snapper. Deaths were due to various causes such as influx of cold water, clogged drains, and fish jumping out of tanks. At the zebrafish facility, 17 fish died when the pumps overheated the water. The University of Miami campus sustained minimal damage.

Following the hurricane, the animal program staff and investigators at RSMAS determined that appropriate procedures were in place and that the facilities were well prepared for the storm and no changes needed to be made. The zebrafish facility will have two portable air conditioning units available in the room prior to a storm.

Based on its assessment of this description, OLAW concurs that actions taken prior to the storm contributed to minimizing animal deaths and supports the post-disaster assessments. Thank you for keeping OLAW apprised on this matter.

Sincerely,

Axel Wolff, MS, DVM

Axel Wolff, M.S., D.V.M.
Deputy Director
Office of Laboratory Animal Welfare

cc: IACUC Chair

A3224 -

UNIVERSITY
OF MIAMI
OFFICE of the VICE PROVOST for RESEARCH

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John L. Bixby, Ph.D.
Vice Provost for Research

November 15, 2017

Axel V. Wolff, M.S., D.V.M.
Director, Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health
Rockledge 1, Suite 360, MSC 7982
6705 Rockledge Drive
Bethesda, MD 20892-7982

Dear Dr. Wolff,

I am writing to follow up our preliminary report regarding disaster-related animal losses. As a result of Hurricane Irma, which made landfall in the Florida Keys (immediately south of Miami) in September 11, 2017, the University of Miami was impacted directly. The University of Miami was extremely well-prepared for such an event and there was minimal damage. Most animals were unaffected; however, there were some losses of aquatic species at the Rosenstiel School of Marine and Atmospheric Sciences (RSMAS) in the outdoor aquaculture facility, and at our Coral Gables Campus zebrafish facility.

At RSMAS, prior to the storm, personnel from the aquaculture facility moved their most valuable cobia, snapper and grouper research fish (about 54) from outdoor tanks to the indoor SUSTAIN facility wave tank in the new Marine Technology & Life Sciences Seawater building (MTLSS).

During the storm, the outside hatchery sustained damage but no major infrastructure was lost. The churned up water from Biscayne Bay made all of the tanks exceptionally cloudy with debris, and heater power was lost for one vat of juveniles. Out of the approximately 500,000 fish in the hatchery, the following small number of fish mortalities occurred due to the storm:

- 50 juvenile cobia died after a tank top was blown off, allowing influx of cold freshwater, which killed the vulnerable juvenile group
- 35 grouper died when the drain became clogged with sediment and water flow was lost
- 1 adult cobia and 5 juvenile snapper died after their tank top was blown off. These fish jumped out of their tanks and succumbed to the elements.
- No fish were unaccounted for.

A zebrafish colony is housed in the Cox building basement on the Coral Gables campus. As per the hurricane SOP for the colony, some invaluable specialized genetic lines of zebrafish were moved off site or to a higher floor in Cox. During the storm, once power went out, the AC unit that serves the fish facility was not working properly even though the backup generators were in place and working. Monitoring systems indicated that the heat produced by the pumps warmed the main water supply for the fish to 31.5° Celsius. A portable back-up portable AC unit was placed in the pump room. However, 17 fish out of the 3000 present in the colony succumbed to the heat.

After the hurricane, the animal program veterinarians met with RSMAS facilities personnel, UM emergency management and the PIs of aquatic studies to review hurricane preparedness procedures. After the assessment of the procedures, no changes are deemed required at this time. The RSMAS campus hatchery is an outdoor facility and the fish are large; it is impractical to move the entire colony either inside or to another location. Given that moving the most valuable broodstock fish to the wave tank in the SUSTAIN facility was successful, this is an option that likely will be utilized during future major events as needed.

At the Coral Gables campus, the animal program veterinarians met with UM facilities personnel, UM emergency management and the PIs of aquatic studies to review hurricane preparedness procedures. The location and infrastructure of the colony preclude permanent relocation to another area. After the assessment of the procedures, it was decided that in the future, two portable AC units will be placed in the room prior to storm arrival.

I am in agreement with these actions and I consider the issue resolved and closed.

Sincerely,

John L. Bixby, Ph.D.
Vice Provost for Research
Institutional Official

Morse, Brent (NIH/OD) [E]

From: OLAW Division of Compliance Oversight (NIH/OD)
Sent: Thursday, November 16, 2017 4:19 PM
To: condary Individ OLAW Division of Compliance Oversight (NIH/OD)
Cc: Bixby, John L econdary Individu ndary Indiv
Subject: RE: OLAW report for A3224-01

Thank you for sending this report ondary Indivi We will send an official response soon.

Regards, Brent Morse

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

From: condary Individ [mailto: dary Indi @med.miami.edu]
Sent: Thursday, November 16, 2017 10:45 AM
To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>
Cc: Bixby, John L <jbixby@med.miami.edu>; Secondary Individual @med.miami.edu>; ndary Indivi dary Ind @med.miami.edu>
Subject: OLAW report for A3224-01

Dear Dr. Wolff,

Please see the attached final report from Dr. Bixby, the University of Miami's Institutional Official regarding Hurricane Irma-related events for which we gave a preliminary report in late September.

Please do not hesitate to contact me if you have any questions or need additional information.

Secondary Individual

Director of Compliance, IACUC /IBC /ESCRO
University of Miami

A3224-IM

Office of Laboratory Animal Welfare

OLAW

Initial Report of Noncompliance

By: aw

Date: 9/22/17

Time: 1:40

Name of Person reporting: Secondary Individual

Telephone #: Phone Number

Fax #:

Email:

Name of Institution: U of Miami

Assurance number: A3224

Did incident involve PHS funded activity? _____

Funding component: _____

Was funding component contacted (if necessary): _____

What happened?

50 cobia died in outdoor tank when lid came off + cold water got in
35 groupers died - drain plugged
~ 1 snapper died - jumped out of tank

Species involved: Fish - Cobia, Grouper, Snapper, Zebrafish

Personnel involved: Coral Gables facility - A.C.

Dates and times: stopped, water heated up,

Animal deaths: 17 zebrafish died

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

May make some physical plant changes

Projected submission to OLAW of final report from Institutional Official:

OFFICE USE ONLY

Case #_____