



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) 480-3387

April 26, 2021

Re: Animal Welfare Assurance
A3153 [OLAW Case 2Q]

Dr. Gyongyi Szabo
Chief Academic Officer
Beth Israel Deaconess Medical Center
330 Brookline Ave., (b) (4)
Boston, MA 02215

Dear Dr. Szabo,

The Office of Laboratory Animal Welfare (OLAW) acknowledges receipt of your April 21, 2021 letter reporting a noncompliance with the Public Health Service Policy on Humane Care and Use of Laboratory Animals (Policy) within the animal care and use program at the Beth Israel Deaconess Medical Center (BIDMC). Your letter supplements information in the initial prompt telephone report on April 12, 2021. According to the information provided, OLAW understands that on April 6, 2021, 20 zebrafish were found deceased in 10 newly established breeding tanks. It is suspected residual bleach remained in the tanks after washing due to user error. The associated research protocol is PHS-supported.

Corrective and preventive measures included validating the effectiveness of a hot water only wash cycle. Thus, eliminating the use of bleach. The use of temperature guarantee tapes to ensure that hot water cycles are consistent to ensure tanks are adequately cleaned, has been added. The SOP for cleaning and maintaining all zebrafish tanks was revised and shared with all Principal Investigators who use zebrafish and it was agreed that only hot water would be used for cleaning tanks.

OLAW appreciates the prompt consideration of this matter by Beth Israel Deaconess Medical Center, 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 this incident, to take corrective actions, and prevent recurrence. OLAW concurs that the issue warranted reporting. We appreciate being informed of this matter and find no cause for further action by this office.

Sincerely,

Brent C. Morse -S Digitally signed by Brent C. Morse -S
Date: 2021.04.26 11:24:27 -04'00'

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

cc: IACUC Contact

A3153

Beth Israel Deaconess
Medical Center



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

April 21, 2021

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

Gyongyi Szabo, MD, PhD, FAASLD, AGAF, FACP
Mitchell T. Rabkin, M.D. Chair
Professor of Medicine and Faculty Dean for Academic Affairs
Harvard Medical School
Chief Academic Officer
Beth Israel Deaconess Medical Center
Beth Israel Lahey Health

**Re: Non-compliance on Beth Israel Deaconess Medical Center (BIDMC)
protocol # 056-2015 titled "Identification and characterization of novel
regulators of stem cell production and function in zebrafish." Supported by
NIH grants, R01 DK098241 and R01 HL154480 under the title
"Developmental Activation of the Inflammasome Controls Hematopoietic Stem
Cell Production".**

Dear Dr. Wolff:

The BIDMC IACUC oversees a large zebra fish colony that is shared with Boston Children's Hospital. On April 6, 2021, researchers from a laboratory at Boston Children's Hospital established several breeding tanks. Later that same day, 20 of the fish were found deceased across 10 tanks. The reason is unclear, but it is suspected that an error in processing the tanks through the dishwashers may have resulted in residual bleach remaining in the breeding tanks, dividers and/or enrichment devices. The protocol for the washing of breeding tanks in the dedicated dishwashers historically required bleach as a cleaning agent and tanks have been processed using this method for many years. We speculate that a user applied the bleach and neglected to run the wash cycle. Another possible explanation may be that a different user may have assumed that the tanks were clean and placed them into circulation.

In response to the incident, the Animal Research Facility Associate Director tested hot-water wash cycles with and without the addition of bleach on April 7, 2021. After completion of each cycle, she swabbed the inside of tanks and equipment, and then used a real-time ATP measuring device to detect the presence of organic material. She found that both cycles resulted in zero detectable ATP. The conclusion is that it is appropriate to eliminate the use of bleach in the wash cycle and thus decrease the risk to the fish colonies. Bleach or any other disinfectant will no longer be used to wash fish tanks/equipment. Moving forward, we will also add the use of temperature guarantee tapes to ensure that hot water cycles are consistent to ensure cages are adequately cleaned.

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Boston, MA 02215
Tel: 617-667-9050
gszabo1@bidmc.harvard.edu

The SOP for cleaning and maintaining all zebrafish tanks was revised and shared with all Principal Investigators who use zebrafish and it was agreed that only hot water would be used for cleaning tanks.

An unanticipated outcomes form was submitted to the IACUC by the Animal Facility Associate Director for review at the April 8, 2021 IACUC meeting. The solution and the revised SOP were both approved. We believe that this will prevent a similar incident from occurring in the future.

Sincerely,

 (b) (6)

Gyongyi Szabo, MD, PhD
Chief Academic Officer/Institutional Official

Cc: Animal Facility Management
Principal Investigator
IACUC Chair
IACUC Administrator
AAALAC, International
Children's Hospital IACUC Administration

330 Brookline Avenue
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gszabo1@bldmc.harvard.edu

Wolff, Axel (NIH/OD) [E]

From: OLAW Division of Compliance Oversight (NIH/OD)
Sent: Friday, April 23, 2021 7:46 AM
To: (b) (6)
Cc: OLAW Division of Compliance Oversight (NIH/OD)
Subject: RE: letter

Thank you for this report, (b) (6) We will send a response soon.

Axel Wolff, M.S., D.V.M.
Deputy Director, OLAW

From: (b) (6)
Sent: Wednesday, April 21, 2021 5:34 PM
To: OLAW Division of Compliance Oversight (NIH/OD) <olawdco@od.nih.gov>
Cc: (b) (6) Szabo, Gyongyi (HMFP - Chief Academic Officer)
<gszabo1@bidmc.harvard.edu>; (b) (6)
(b) (6)
Subject: letter

Good Evening,

Please see the attached letter.

Best,

(b) (6)

(b) (6)

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Initial Report of Noncompliance

By: BCM

Date: 4/12/2021

Time: Voicemail

Name of Person reporting: (b) (6)

Telephone #: (b) (6)

Fax #:

Email:

Name of Institution: Beth Israel Deaconess

Assurance number: A3153

Did incident involve PHS funded activity? ?

Funding component:

Was funding component contacted (if necessary):

What happened? Zebrafish deaths due to bleach in system. Accident.

Species involved: Danio rerio

Personnel involved: ?

Dates and times: ?

Animal deaths: Yes

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

Bleach removed. Investigating.

Projected submission to OLAW of final report from Institutional Official:

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Case #