

## Annual Report to OLAW

Institution: The Feinstein Institute for Medical Research - Northwell Health
Assurance Number: D16-00107 (A3168-01)
Reporting Period: January 1, 2019 - December 31, 2019

This Institution's Institutional Animal Care and Use Committee (IACUC), through the Institutional Official, provides this annual report to the Office of Laboratory Animal Welfare (OLAW).

### I. Program Changes [Select A or B]

- ☐ A There have been no changes in this Institution's program for animal care and use as described in the Assurance. [Skip to Item II.]
- ☒ B Change(s) in this institution's program for animal care and use as described in the Assurance have occurred during this reporting period. [\(FAQ 6\)](#)

Select all that apply:

- ☐ This institution's AAALAC accreditation status has changed [\(PHS Policy IV.A.2.\)](#).
- ☐ [AAALAC Accredited](#) - Category 1
- ☐ Non-Accredited - category 2
- ☒ This institution's program for animal care and use has changed [\(PHS Policy IV.A.La-I.\)](#). [Attach a full description of the changes.]
- ☐ The individual designated by this Institution as the Institutional Official has changed. [Provide name, title(s), address, e-mail, phone, and fax numbers in Item V.]
- ☒ The membership of this Institution's IACUC has changed. [Provide current roster of members in Item VI.]

### II. Semiannual Evaluations

This IACUC has conducted semiannual evaluations of the Institution's program and inspections of the Institution's facilities (including satellite facilities) on the dates below. Reports of the evaluations and inspections have been submitted to the Institutional Official. The reports include any IACUC-approved departures from the Guide with a reason for each departure, any deficiencies (significant or minor) that were identified, and a plan and schedule for correction of each deficiency. [Do not provide semiannual reports unless they include a minority view.]

#### A. Program Evaluations

[Two dates (month/day/year) must be provided to satisfy the PHS Policy requirement that evaluations be done at 6 month intervals. If the IACUC conducted more than 2 evaluations of the program during the reporting period, please attach a list showing the dates.]

Date 1: March 19, 2019	Date 2: September 16, 2019
------------------------	----------------------------

**B. Facility Inspections**

[Two dates (month/day/year) must be provided to satisfy the PHS Policy requirement that facility inspections be done at 6 month intervals. If the IACUC conducted more than 2 inspections of each site during the reporting period, please attach a list showing the dates.]

**Date 1:** 3/7, 3/8, 3/13, 3/15, 3/18, 3/19,  
3/20, 3/25, 3/26, 3/29, 4/4, 4/5, 4/8, 4/9, 4/11



**Date 2:** 9/9, 9/12, 9/13, 9/24, 9/25, 9/27,  
9/30, 10/3, 10/4, 10/7, 10/10

**III. Minority Views [Select A or B]**

☐ A There were no minority views during this reporting cycle.

☒ B Any minority views submitted by members of the IACUC regarding reports filed under [PHS Policy IV.E.](#) for this reporting cycle are attached. ([Appendix 1](#))

**IV. Signatures**

<b>IACUC Chairperson</b>	<b>Institutional Official</b>
<b>Name:</b> Max Brenner, MD, PhD	<b>Name:</b> Ping Wang, MD
<b>Signature:</b>  (b) (6)	<b>Signature:</b>  (b) (6)
<b>Date:</b> 01/27/20	<b>Date:</b> 1/27/20

**V. Change in Institutional Official *NOT APPLICABLE***

<b>Name:</b>	
<b>Title:</b>	<b>Degree/Credential:</b>
<b>Name of Institution:</b>	
<b>Address:</b> [street, city, state, zip code]	
<b>E-mail:</b>	
<b>Phone:</b>	<b>Fax:</b>

## VI. Change in IACUC Membership [Current roster]

<b>Institution: The Feinstein Institute for Medical Research – Northwell Health</b>			
<b>IACUC Contact Information</b>			
Address: [street, city, state, zip code]			
Director, Animal Welfare Office 125 Community Drive, Great Neck, NY 11021			
E-mail: iacuc@northwell.edu			
Phone: (b) (6)		Fax: (b) (6)	
<b>IACUC Chairperson</b>			
Name: Max Brenner			
Title: Assistant Investigator		Degree/Credentials: MD, PhD	
PHS Policy Membership Requirements***: Scientist			
<b>IACUC Roster [Provide below or attach]</b>			
Name of Member/ Code*	Degree/ Credential	Position Title/ Occupational Background**	PHS Policy Membership Requirements***
(b) (6)			Scientist
Lotus Altholtz	DVM, DACLAM	Doctor of Veterinary Medicine	Attending Veterinarian
(b) (6)			Nonscientist/Nonaffiliated
			Scientist
			Member
			Scientist (alternate)
			Scientist (alternate)
			Scientist
			Scientist
			Scientist (alternate)
			Scientist (alternate)
			Scientist
			Scientist (alternate)
			Scientist (alternate)
			Member (alternate)

\* Names of members, other than the chairperson and veterinarian, may be represented by a number or symbol in this report 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.

\*\* List specific position titles for all members, including nonaffiliated (e.g., banker, teacher, volunteer fireman; not "community member" or "retired").

\*\*\* PHS Policy Membership Requirements:

*Veterinarian*

veterinarian with training or experience in laboratory animal science and medicine or in the

responsibility for activities involving animals at the Institution.

**Scientist** practicing scientist experienced in research involving animals.

**Nonscientist** member whose primary concerns are in a nonscientific area (for example, ethicist, lawyer, member of the clergy).

**Nonaffiliated** Individual who is not affiliated with the Institution in any way other than as a member of the IACUC, and is not a member of the immediate family of a person who is affiliated with the Institution. This member is expected to represent general community interests in the proper care and use of animals and should not be a laboratory animal user. A consulting veterinarian may not be considered nonaffiliated.

[Note: all members must be appointed by the CEO (or individual with specific written delegation to appoint members) and must be voting members. Non-voting members and alternate members must be so identified.]

### **Changes to Program:**

In accordance with federal regulations, we previously utilized the services of a consulting veterinarian; however, we recently hired a full time Attending Veterinarian, Dr. Lotus Altholtz, effective 12/2/19. Dr. Altholtz is responsible for the Program of Veterinary Care and oversight of the Center for Comparative Physiology (central vivarium). This change supersedes all prior arrangements.

This organizational change was communicated via email to NIH CLAW on 12/9/19. Response received 12/10/19 "the Office of Laboratory Animal Welfare (CLAW) has reviewed and accepted the amendment to your Animal Welfare Assurance (Assurance) #D16-00107 (A316B-01), dated December 9, 2019, to change your Institution's name from Feinstein Institute for Medical Research to Feinstein Institutes for Medical Research."

We previously utilized wild sea caught lamprey in research activities. Use of this species has ceased.

## Minority Views (Fall 2019 Semi-Annual Program Review)

Select A or B:

☐  
☒

A. No minority views were submitted or expressed.

B. The following minority views were expressed: *[Insert minority views here or attach]*

The IACUC uses the CLAW checklist as a guide when conducting the semi-annual Program review. Two IACUC members submitted the following **minority views**:

Member 1: "The IACUC committee on 9/16/19 during the semi-annual Program review found the IACUC's institutional policies and responsibilities as it refers to humane endpoints established for various animal models, including models of cardiovascular shock, to be Acceptable.

This minority view is that there is currently a Minor Deficiency in the program for establishing humane endpoints for a cardiovascular rodent study. Creating and approving updated guidelines for humane endpoints has been delayed due to the Principle Investigator appealing the veterinarian's humane endpoint guidelines, and to scheduling conflicts. Detailed humane endpoint criteria is still currently unavailable as to the date of this semi-annual program review.

It is my opinion that there is a minor deficiency for humane endpoints being established, as it pertains to the rodent cardiac arrest studies. The currently established humane endpoints are not sufficient. "

Member 2: "Within the Cardiac Arrest studies there is up to 40% mortality with unreliable humane endpoints. This affects a large portion of current rat studies, and has been an ongoing issue for over 3 months. A guideline has not been established due to inability to reach consensus between the AV and the Lab. Currently, there is no proposed due date for the Cardiac Arrest Model Guideline. A meeting has been scheduled by the IACUC with the lab to allow them to appeal the latest version of the cardiac arrest model guideline, which entailed AV recommendations. Page 27 - The use of humane endpoints contributes to refinement by providing an alternative to experimental endpoints that result in unrelieved or severe animal pain and distress, including death. The humane endpoint should be relevant and reliable. "

### IACUC Response to Minority Views:

The IACUC majority disagrees with the minority views that establishing humane endpoints constitute a minor deficiency in our IACUC Protocol Review program. The majority view is that there is no programmatic deficiency since the IACUC has actively sought to define and implement humane endpoint criteria for all protocols, especially those involving unalleviated pain or distress.

Working with the Attending Veterinarian (AV) and Principal Investigators (PI), the IACUC has developed and approved numerous Animal Care and Use Guidelines (since 2013). The Guidelines are intended to inform and guide decisions in the development of animal use protocols and establish general standards of care as use. Deviations require scientific justification and IACUC approval.

The minority views are limited to the IACUC's ongoing effort to refine a subgroup of protocols involving the cardiac arrest model in rodents. The cardiac arrest model and protocol in question underwent veterinary consultation and pre-review prior to IACUC review. The protocol was



distributed to the IACUC to call for a disposition of review, consistent with federal regulations. As there were no requests for full committee review, the study underwent a designated member review and was approved.

After approval, the Attending Veterinarian worked with the PI and the IACUC recommending refinements to the studies existing humane endpoint criteria. Establishing humane endpoint criteria for this model that are both predictive of worse outcomes and would not interfere with the scientific rigor of the study has proven challenging. Yet, the IACUC worked diligently with the AV and PI to identify potential humane endpoints, enhance post procedural palliative care. Indeed, after numerous meetings with the PI and with the IACUC, the IACUC approved Cardiac Arrest Guidelines (11/15/19) containing IACUC approved humane endpoint criteria. The IACUC conducts comprehensive reviews of all research projects confirming that they will be conducted in accordance with the Animal Welfare Act insofar as it applies to the research project, and that the research project is consistent with the Guide unless acceptable justification for a departure is presented.

Of note:

1. With respect to the minority view statement, **"Within the Cardiac Arrest studies there is up to 40% mortality with unreliable humane endpoints"**, survival differs depending on the duration of the cardiac arrest. The goal of the research is to develop therapeutic drugs or treatment to increase survival in cardiac arrest. As such, models with high mortality rates are needed, always accounting for improvement. A factor that is considered is the mortality in human patients, which is ~90%. Therefore, the severity of the model must be comparable to humans. The IACUC thoughtfully deliberated and approved the humane endpoints and the scientific justification the PI and study team have provided.
2. The PI and IACUC accepted all of the veterinary recommendations for refinements to this model with the exception of including seizures as a humane endpoint and a request that animals be monitored every 8 hours overnight if they were not ambulating. Scientific justification was provided and accepted by the majority of the IACUC (except by these two members).

Seizures are often observed in cardiac arrest patients, however it is not clear whether seizures are indicative of imminent death or even associated with poor outcome. Currently, a randomized human trial is ongoing to examine the roles of seizures in cardiac arrest. In these studies, highly severe and recurrent seizures (every ~ 2 minutes) were found to be correlated with increased survival time after cardiac arrest. Their ongoing study of lipid treatment also shows that some seizures are correlated with better survival and neurological outcomes. Therefore, seizures are a medical condition that should be studied as an outcome but should not be considered as humane endpoint criteria. Further the PI provided evidence that animals die abruptly in an unpredictable manner. Adding seizures as humane endpoint criteria significantly interferes with the scientific rigor of the study in which seizures are correlated with improved survival.

3. Significant efforts were made by the IACUC, PI and study personnel to ameliorate the concerns raised by these two members. The PI and study team were cooperative and collegial during the process including providing re-education to the committee in this particular model and scientific justification to address concerns and assisted in the development of the Animal Care and Use Guideline as content experts. However, there was a clear lack of understanding and persistent refusal to accept the scientific justifications by these two members.

RABBI ART VERNON

CONGREGATION SHAARAY SHALOM

711 DOGWOOD AVENUE, WEST HEMSTEAD, NY 11552

January 6, 2020

To Whom It May Concern:

As the Non-Scientist, Non-Institutional Member of the Feinstein Institute Animal Care and Use Committee for the past four years, I have been an active participant in almost all the discussions with regard to animal welfare in scientific studies conducted at the Feinstein Institute. It is in this capacity that I am writing in regard to accusations of insensitivity to animal welfare issues by our Committee. Specifically, accusations made concerning the humane treatment of rats involved in cardiac arrest studies.

Our Committee has spent the past six months developing guidelines for the humane treatments of animals in cardiac arrest studies. We have engaged in vigorous debate, considered points of view of both veterinary staff and principal investigators, and researched practices at other institutions. Our concern has always been to mitigate the pain and suffering of animals, while at the same time, allowing researchers to pursue legitimate scientific goals with adequate justification. As a Non-Scientist, I admit that I do not always fully understand the scientific issues, but my colleagues on the IACUC have always been able to explain the issues in terms that I can grasp. It is clear that some studies pose a higher risk to animal welfare than others, but these risks are always justified by researchers in order to receive the approval of the IACUC. Frankly, I am confounded by --any accusation of insensitivity to animal welfare given the extended, detailed deliberations of the IACUC with--- regard to cardiac arrest studies and every proposal using animals in research!

If I believed that the Feinstein Institute Animal Care and Use Committee was either disregarding the welfare of animals or was dismissive of the opinions of the larger community as represented by me, the Non-Scientist Member, I would cease my participation. I consider the charges brought against the Feinstein Institute Animal Care and Use Committee baseless and without merit.

Thank you for your consideration in this matter.

Sincerely, / s/

(b) (6)

,