According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless t dispays a valid OMB control number. The valid OMB control number for the information collections of 1995, an agency may not conduct or sponsor, and a person is not required to repeat to spay a valid OMB control number. The valid OMB control number for the information collections of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of 1995, an agency may not conduct or sponsor, and a person is not required to respond to 1995, an agency may not conduct or sponsor, and a person is not required to respond to 1995, an agency may not conduct or sponsor, and a person is not required to respond to 1995, an agency may not conduct or sponsor, and a person is not required to represent the required to represent the person of 1995, an agency may not conduct or sponsor, and a person is not required to represent the required to require the required to represent the r

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Fiscal year: 2020

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Annual Report of Research Facility Column E Explanation

(TYPE OR PRINT)

This information is required by law (7 U.S.C. 2143 and 9 C.F.R. §2.36). Failure to report according to the regulations can rest in an order to cease and desist.

1. REGISTRATION NUMBER	2. Research Facilty Headquarters address
	University of South Florida
58-R-0015	12901 Bruce B Downs Blvd, MDC20
	Tampa, FL 33612
3. Number of animals used in the study.	4. Species (common name) of animals used in the study.
6	Guinea Pig

5. Explain the procedure producing pain and distress.

Guinea pigs undergoing hyperoxia (oxygen levels more than 75%) may have some pain and distress. Although hyperoxia in guinea pigs may cause animal discomfort, experimental animals subjected to hyperoxia manifest the hyperoxic heart injury necessary as a model to study the underlying changes. To avoid discomfort/pain animals will be monitored for signs of respiratory difficulty and euthanize if there are signs of respiratory distress.

6. Provide the scientific justification for not providing the appropriate anesthetics, analgesics, or tranquizing drugs during procedures where the animal experienced accompanying pain or distress greater than momentary or slight.

Although treatment of hyperoxia may cause some pain/discomfort to guinea pigs, we will not be using any analgesics, anesthetics, or tranquilizers. As the main goal of the study is to investigate effect of hyperoxia on cardiovascular remodeling (electrical remodeling, functional and structural remodeling), and many reports suggest the influence of anesthetics (PMID: 31082134), analgesics (PMID: 9694923; PMID: 26461073; PMID: 6328399), and tranquilizers (PMID: 21570617), use of these drugs may interfere with cardiovascular physiology and therefore will not be used in our study. We will be monitoring guinea pigs under hyperoxia treatment every 6h (throughout the treatment time) and check for any signs of respiratory distress/ discomfort. Animals that show signs of discomfort will be removed from the study and will be euthanized immediately.

7. What, f any, Federal regulations require this procedure? Cite the agency, the Code of Federal Regulations (CFR) title number, and the specific section number (e.g., APHIS, 9 CFR 113, 102):

Not Applicable.	
Agency	CFR
Not Applicable	Not Applicable

APHIS FORM 70236 JUL 2020

Uploaded to Animal Research Laboratory Overview (ARLO) on 06/08/2021