

University of Toledo
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Minutes
Jul-15-2020

Meeting Attendance

Member	Attended	Voting	Staff	Scientific	Affiliated
Andreana, Peter R	Yes	Yes	No	Yes	Yes
Arburn, Gregory	No	Yes	No	No	No
Bechaz, Scott Edward	Yes	Yes	Yes	No	Yes
Cicila, George Ph.D.	No	Yes	No	Yes	Yes
Eisenmann, Kathryn M. Ph.D.	Yes	Yes	No	Yes	Yes
Ferreira, Viviana P. D.V.M., Ph.D.	Yes	Yes	No	Yes	Yes
Furuta, Saori Ph.D.	Yes	Yes	No	Yes	Yes
Hall, Frank Ph.D.	Yes	Yes	No	Yes	Yes
Imam, Shahnawaz Ph.D.	No	Yes	No	Yes	Yes
Joseph, Elaine	Yes	Yes	Yes	No	Yes
Khandekar, Sushant N	No	No	Yes	No	Yes
Khuder, Sadik Ph.D.	Yes	Yes	No	Yes	Yes
Liu, Guofa	Yes	Yes	No	Yes	Yes
Lorenz, Heather M. MSOH, CIH, CSP,CMLSO	No	No	Yes	No	Yes
Matson, Jyl S Ph.D.	Yes	Yes	No	Yes	Yes
Refsnider-Streby, Jeanine	Yes	Yes	No	Yes	Yes
Rohrs, Skylar Lee	No	No	Yes	No	Yes
Root, Lisa Jane	Yes	Yes	No	No	Yes
Stepkowski, Stanislaw M. Ph.D.	Yes	Yes	No	Yes	Yes
Tiwari, Amit K Ph.D.	Yes	Yes	No	Yes	Yes

1. Dr. Furuta left the meeting at 1:37pm.

Chair's Remarks

1. Meeting was called to order at 12:04pm.
2. Due to the use of videoconference, voting was in chat or microphone (only when person disagrees or abstains). This prevents everyone saying "yes" at the same time.

Old Business

1. The minutes from June were approved (14 yes, 0 no, 0 abstained).

New Business

1. Dr. Joseph discussed the review procedures and changes to the review process in IRB Manager.
2. Mr. Bechaz discussed an issue with temperature fluctuations outside of the range required in the Guide for the Care and Use of Laboratory Animals for the Health and Human Services animal facility. Facilities has been made aware of the issue and has been resolved.

Unexpected outcomes of research (Scott Bechaz/Lisa Root)

1. Dr. Root discussed an issue involving an investigator that had an increase in post-operative deaths over a one month period. Necropsy showed animals died of post-operative infections. Further investigation showed the laboratory was using a diluted bottle of Meloxicam that appeared contaminated (cloudy) and was kept at room temperature. Corrective actions included discarding the diluted drug, storing future dilutions in refrigerator and discarding after one week. This is the same investigator that was discussed last month for a non-compliance involving a student who missed post-operative monitoring for several days. This laboratory has had numerous non-compliances over the past year, including one protocol suspension. The IACUC voted to suspend the protocol pending a submission and approval of a management plan for the protocol and laboratory. This management plan must be signed off by the Chair and the Dean and include at least a part-time FTE Lab Manager to manage the laboratory and the colony. All approved (14 yes, 0 no, 0 abstained).
2. Dr. Root discussed an issue involving an investigator who failed to euthanize mice after they exceeded tumor guidelines per the IACUC protocol and the IACUC Tumor Monitoring Protocol. Corrective actions included the investigator and lab meeting with the Department of Laboratory Animal Resources to undergo retraining. The IACUC voted to send a letter to the investigator regarding the incident acknowledging the corrective actions. All approved (13 yes, 0 no, 0 abstained).

PROTOCOLS REVIEWED

Amendments for Full Committee Review - 0

Miscellaneous

PROTOCOL REPORTS

Annual Renewals Approved by Designated Review - 0

New Protocols or Tri Annual Submission Approved by Designated Review - 1

Protocol #:	Title: Effects of multiple stressors on freshwater food webs	1) Furuta, Saori Ph.D.;
400056		2) Liu, Guofa

Personnel Amendments Approved by Designated Review - 7

Protocol #: 108682-04 **Title:** Rat Genetic Models for Studies in Cardiovascular and Renal Function

Personnel Added: Juan Jaume M.D.

Personnel Removed: no one

Protocol #: 108727-04 **Title:** Great Lakes Fish Population Assessments

Personnel Added: Brittani Furlong

Personnel Removed: no one

Protocol #: 108754-01 **Title:** Effects of Glucocorticoid Agonists on Adipose Tissue Metabolism

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108754-01 **Title:** Effects of Glucocorticoid Agonists on Adipose Tissue Metabolism

Personnel Added: [REDACTED] and Marziyeh Jahromi

Personnel Removed: Kari Neifer

Protocol #: 108755-03 **Title:** The Role of Dietary Components in Metabolic Diseases

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108880-01 **Title:** Genetics of Hypertension and associated diseases

Personnel Added: Juan Jaume M.D.

Personnel Removed: no one

Protocol #: 108889-01 **Title:** Role of antigenicity in autoimmune diseases

Personnel Added: Eric Morgan M.D., PhD

Personnel Removed: no one

Amendments Approved by Designated Review - 1

Protocol #: 108889-01 **Protocol Title:** Role of antigenicity in autoimmune diseases

Summary: To study cardiovascular function by echocardiography (ECHO).

H. Adjournment

1. The meeting adjourned at 1:53pm.

University of Toledo

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Minutes
Jul-27-2020

Meeting Attendance

Member	Attended	Voting	Staff	Scientific	Affiliated
Andreana, Peter R	No	Yes	No	Yes	Yes
Arburn, Gregory	No	Yes	No	No	No
Bechaz, Scott Edward	Yes	Yes	Yes	No	Yes
Cicila, George Ph.D.	Yes	Yes	No	Yes	Yes
Eisenmann, Kathryn M. Ph.D.	Yes	Yes	No	Yes	Yes
Ferreira, Viviana P. D.V.M., Ph.D.	Yes	Yes	No	Yes	Yes
Furuta, Saori Ph.D.	Yes	Yes	No	Yes	Yes
Hall, Frank Ph.D.	Yes	Yes	No	Yes	Yes
Imam, Shahnawaz Ph.D.	Yes	Yes	No	Yes	Yes
Joseph, Elaine	Yes	Yes	Yes	No	Yes
Khuder, Sadik Ph.D.	No	Yes	No	Yes	Yes
Liu, Guofa	Yes	Yes	No	Yes	Yes
Lorenz, Heather M. MSOH, CIH, CSP,CMLSO	No	No	Yes	No	Yes
Matson, Jyl S Ph.D.	Yes	Yes	No	Yes	Yes
Refsnider-Streby, Jeanine	Yes	Yes	No	Yes	Yes
Rohrs, Skylar Lee	No	No	Yes	No	Yes
Root, Lisa Jane	Yes	Yes	No	No	Yes
Stepkowski, Stanislaw M. Ph.D.	Yes	Yes	No	Yes	Yes
Tiwari, Amit K Ph.D.	Yes	Yes	No	Yes	Yes

Chair's Remarks

1. Meeting was called to order at 2:04pm.
2. Due to the use of videoconference, voting was in chat or microphone (only when person disagrees or abstains). This prevents everyone saying "yes" at the same time.

Old Business - None

New Business

1. Dr. Eisenmann discussed the Lab Management Plan submitted by an Investigator whose protocol is currently suspended. The IACUC voted to reject the Plan, pending a number of mandatory corrective actions (14 for, 0 against, 0 abstain).

Unexpected outcomes of research (Scott Bechaz/Lisa Root) - None

PROTOCOLS REVIEWED

Amendments for Full Committee Review - 0

Miscellaneous

PROTOCOL REPORTS

Annual Renewals Approved by Designated Review - 0

-

New Protocols or Tri Annual Submission Approved by Designated Review - 0

Personnel Amendments Approved by Designated Review - 0

-

Amendments Approved by Veterinary Verification and Consultation Review - 0

H. Adjournment

1. The meeting adjourned at 3:03pm.

University of Toledo
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Minutes
Aug-19-2020

Meeting Attendance

Member	Attended	Voting	Staff	Scientific	Affiliated
Andreana, Peter R	Yes	Yes	No	Yes	Yes
Arburn, Gregory	Yes	Yes	No	No	No
Bechaz, Scott Edward	Yes	Yes	Yes	No	Yes
Cicila, George Ph.D.	Yes	Yes	No	Yes	Yes
Eisenmann, Kathryn M. Ph.D.	Yes	Yes	No	Yes	Yes
Ferreira, Viviana P. D.V.M., Ph.D.	Yes	Yes	No	Yes	Yes
Furuta, Saori Ph.D.	Yes	Yes	No	Yes	Yes
Hall, Frank Ph.D.	Yes	Yes	No	Yes	Yes
Imam, Shahnawaz Ph.D.	Yes	Yes	No	Yes	Yes
Joseph, Elaine	Yes	Yes	Yes	No	Yes
Khuder, Sadik Ph.D.	No	Yes	No	Yes	Yes
Liu, Guofa	No	Yes	No	Yes	Yes
Lorenz, Heather M. MSOH, CIH, CSP, CMLSO	No	No	Yes	No	Yes
Matson, Jyl S Ph.D.	Yes	Yes	No	Yes	Yes
Refsnider-Streby, Jeanine	Yes	Yes	No	Yes	Yes
Rohrs, Skylar Lee	No	No	Yes	No	Yes
Root, Lisa Jane	No	Yes	No	No	Yes
Stepkowski, Stanislaw M. Ph.D.	Yes	Yes	No	Yes	Yes
Tiwari, Amit K Ph.D.	Yes	Yes	No	Yes	Yes

1. Dr. Auburn arrived at 12:13pm
2. Dr. Andreana left at 1:00pm

Chair's Remarks

Old Business

1. Minutes from July 15, 2020 and July 27, 2020 were approved (13 approve, 0 against, 0 abstained)

New Business

1. The Semi-Annual Facility Inspection report was reviewed. There were two repeat deficiencies. The IACUC agreed to re-inspect the two rooms with repeat deficiencies in

three months time. In addition, the departmental room with repeat deficiencies will be have a letter sent to the Departmental Chair. All other deficiencies were viewed as minor and have received responses. (12 approved, 0 opposed, 1 abstained)

2. The Lab Management Plan, associated with the suspended protocol was reviewed. The IACUC voted to approve the Lab Management plan with minor administrative corrections. (14 approved, 0 opposed, 0 abstained) The IACUC then voted to reinstate the suspended protocol (14 approved, 0 opposed, 0 abstained)
3. The IACUC also voted to allow Mr. Harberson to only be admitted into DLAR spaces while accompanied by either the Investigator or Ms. Mariah Dupree for a period of three months. After that time, the IACUC will re-evaluate whether to reinstate full access to the DLAR facilities. (14 approved, 0 opposed, 0 abstained)

Unexpected outcomes of research (Scott Bechaz/Lisa Root)

PROTOCOLS REVIEWED

Protocol #: 107556-09

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 13, Against: 0, Abstain: 0)

Protocol #: 108757-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action:
(For: 13, Against: 0, Abstain: 0)

Protocol #: 400083

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action:
(For: 13, Against: 0, Abstain: 0)

Protocol #: 400085

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action:
(For: 13, Against: 0, Abstain: 0)

Protocol #: 400088

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action:
(For: 13, Against: 0, Abstain: 0)

Amendments for Full Committee Review - 0

Miscellaneous

PROTOCOL REPORTS

Annual Renewals Approved by Designated Review - 0

New Protocols or Tri Annual Submission Approved by Designated Review - 0

Personnel Amendments Approved by Designated Review - 12

Protocol #: 105923-13 **Title:** The Effect of Diabetes and Anti-Diabetic Drugs on Bone

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 105923-13 **Title:** The Effect of Diabetes and Anti-Diabetic Drugs on Bone

Personnel Added: Kathryn Smedlund and Marziyeh Jahromi

Personnel Removed: no one

Protocol #: 107700-08 **Title:** Breeding of Sodium Pump Genetically Modified Mice

Personnel Added: Steven Haller Ph.D., Prabhatchandra Dube, [REDACTED]
[REDACTED], [REDACTED], [REDACTED] and Andrew Kleinhenz

Personnel Removed: no one

Protocol #: 108390-07 **Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (BOHB) synthesis to prevent hypertension-associated premature vascular aging

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108663-04 **Title:** Microcystin Induced Hepatotoxicity in Pre-Existing Liver Disease

Personnel Added: Sivarajan Kumarasamy Ph.D.

Personnel Removed: no one

Protocol #: 108668-04 **Title:** Innate immune responses to virus infection

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108692-02 **Title:** Counter Regulatory Mechanisms of Cardiotonic Steroids in Cardiorenal Disease

Personnel Added: Sivarajan Kumarasamy Ph.D.

Personnel Removed: no one

Protocol #: 108757-03 **Title:** MicroRNAs Modulate Therapy Resistance In Prostate Cancer

Personnel Added: [REDACTED]

Personnel Removed: [REDACTED]

Protocol #: 108778-02 **Title:** Rat Models of Exercise Capacity

Personnel Added: no one

Personnel Removed: [REDACTED]

Protocol #: 108864-01 **Title:** Inhibiting BRD9 in Melanoma

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108940-01 **Title:** Empathy and developmental pesticide exposure in mice

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108941-01 **Title:** Empathy and developmental pesticide exposure in prairie vole

Personnel Added: [REDACTED]

Personnel Removed: no one

Amendments Approved by Designated Review - 3

Protocol #: 108390-07 **Protocol Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (β OHB) synthesis to prevent hypertension-associated premature vascular aging

Summary: Inclusion of a new drug to treat hypertension. The specific drug is spermidine, a polyamine. Spermidine is a potent and specific inducer of autophagy and we hypothesize it could be a novel therapeutic of hypertension and β OHB synthesis. We intend to administer this drug at a dose of 3mM dissolved in drink water, as described previously (Eisenberg et al. 2009. & LaRocca, T., et al. 2013.)

Protocol #: 108790-02 **Protocol Title:** Interplay between Dietary Fiber and Gut Microbiota in Hepatocellular Carcinoma

Summary: The purpose of this amendment is to investigate metabolites in the milk of WT & KO cholestatic mothers placed on a fermentable-fiber diet in order to determine whether bile acids could be transported through milk causing subsequent cholemia and liver injury in the pups of these breeders.

Protocol #: 108881-01 **Protocol Title:** Fat deposition and adipose tissue sampling in migratory songbirds

Summary: This amendment is to add species to the current protocol. We plan to collect fat samples from a small number (up to 10) of individuals of 13 additional species of songbirds. All of the proposed species either breed, or spend extended stopovers (1-2 weeks) during migration, at our Pennsylvania study site. The purpose of adding these species is to collect fat samples for stable isotope analysis from birds that have only ingested local food and water in recent weeks or months so that we can 1) create a baseline validation of the isotopic signature of our study area, and 2) confirm that the local isotopic signature is consistent in fat tissue across many songbird species at the same location.

Amendments Approved by Veterinary Verification and Consultation Review - 3

Protocol #: 400066-01 **Title:** Mouse Models for studying bone microenvironment effects on cancer metastasis and tumor dormancy

Summary: The purpose of this amendment is to add the NOD.Cg-Prkdcscid Il2rgtm1Wjl/SzJ mouse line to this protocol.

Protocol #: 400067 **Title:** Influence of bone microenvironment in cancer bone metastases

Summary: The purpose of this amendment is to add Meloxicam as an analgesia agent as there is currently a national shortage of Carprofen.

Protocol #: 400072 **Title:** MDA PCa 118b Tumor Passaging

Summary: The purpose of this amendment is to add the analgesic agent Meloxicam as there is currently a national shortage of Carprofen.

H. Adjournment

1. Meeting was adjourned at 1:57pm

University of Toledo
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Minutes
Sep-16-2020

Meeting Attendance

Member	Attended	Voting	Staff	Scientific	Affiliated
Andreana, Peter R	Yes	Yes	No	Yes	Yes
Arburn, Gregory	Yes	Yes	No	No	No
Bechaz, Scott Edward	Yes	Yes	Yes	No	Yes
Cicila, George Ph.D.	Yes	Yes	No	Yes	Yes
Eisenmann, Kathryn Maria Ph.D.	Yes	Yes	No	Yes	Yes
Ferreira, Viviana P. D.V.M., Ph.D.	Yes	Yes	No	Yes	Yes
Furuta, Saori Ph.D.	Yes	Yes	No	Yes	Yes
Hall, Frank Ph.D.	Yes	Yes	No	Yes	Yes
Imam, Shahnawaz Ph.D.	Yes	Yes	No	Yes	Yes
Joseph, Elaine	Yes	Yes	Yes	No	Yes
Khuder, Sadik Ph.D.	No	Yes	No	Yes	Yes
Liu, Guofa	Yes	Yes	No	Yes	Yes
Lorenz, Heather M. MSOH, CIH, CSP,CMLSO	No	No	Yes	No	Yes
Matson, Jyl S Ph.D.	Yes	Yes	No	Yes	Yes
Refsnider-Streby, Jeanine	Yes	Yes	No	Yes	Yes
Rohrs, Skylar Lee	Yes	No	Yes	No	Yes
Root, Lisa Jane	Yes	Yes	No	No	Yes
Stepkowski, Stanislaw M. Ph.D.	Yes	Yes	No	Yes	Yes
Tiwari, Amit K Ph.D.	No	Yes	No	Yes	Yes

1. Guest in attendance = Dr. Mahesh Pillai.
2. Dr. Gregory Arburn arrived at 12:13 pm
3. Dr. Shahnawaz Imam arrived at 12:22 pm
4. Dr. Stan Stepkowski arrived at 12:30 pm
5. Dr. Peter Andreana arrived at 12:35 and left at 12:59 pm

Chair's Remarks

1. Call to order at 12:04 pm
2. Introduced the guest, Dr. Mahesh Pillai, who is currently serving as Dr. Joseph's backup.

Old Business

1. The minutes from August were approved (13 for, 0 against, 0 abstain).

New Business

1. Dr. Joseph discussed the revision to the IACUC Protocol and Amendment Review SOP. IACUC voted to approve (13 for, 0 against, 0 abstain)
2. Dr. Joseph discussed the revision to the IACUC Pre-review SOP. This SOP was tabled.
3. Dr. Root discussed the revision to the Euthanasia Methods Guideline. IACUC voted to approve (14 for, 0 against, 0 abstain)
4. Mr. Bechaz discussed the previously presented departures to the Guide. These involve sanitation of wire lids on ventilated cages and cage changes on singly housed mice. Wire lids were previously changed every two weeks and now being changed monthly. Cages for singly housed mice were previously being changed weekly and are now being changed monthly. The IACUC approved this departure temporarily in April. Since then, ammonia levels have remained normal between cage changes and there appears to be no change in physical health or wellbeing of animals or in cleanliness of the cages or lids. IACUC approved this departure to continue (14 for, 0 against, 0 abstain)
5. Dr. Ferreira discussed requiring all strains be listed in the IACUC protocol (as a way of making the protocol more understandable), as opposed to only those whose phenotypes cause health or wellbeing issues. Discussion ensued. The IACUC make this change requiring all strains be listed in the protocol (12 for, 3 against, 0 abstain). A subcommittee will be formed to determine how to modify the protocol.

Unexpected outcomes of research (Scott Bechaz/Lisa Root)

1. Dr. Root reported that two cages were found on both August 18 and August 19, 2020 containing mice with hairless areas and sores on their skin. Upon questioning of lab personnel, it was discovered that Nair had been used on the mice and inadequately removed, causing chemical burns. Of the seven (7) mice found in this condition, one had to be euthanized due to its deteriorated condition. Additionally, the use of Nair was not approved for use on the IACUC protocol.

PROTOCOLS REVIEWED

Protocol #: 105818-11

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 14, Against: 0, Abstain: 0)

Protocol #: 108774-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 14, Against: 0, Abstain: 0)

Protocol #: 108778-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 14, Against: 0, Abstain: 0)

Amendments for Full Committee Review - 0

Miscellaneous

PROTOCOL REPORTS

Annual Renewals Approved by Designated Review - 0

New Protocols or Tri Annual Submission Approved by Designated Review - 1

Protocol #:	Title: Breeding of sodium pump 107700-09 genetically modified mice	1) Refsnider-Streby, Jeanine; 2) Joseph, Elaine
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Personnel Amendments Approved by Designated Review - 12

Protocol #: 104045-19 **Title:** Blood Pressure Telemetry in Rats/Surgery Protocol

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 104573-16 **Title:** Genetics of Polygenic Traits in Rats/Breeding

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 105276-16 **Title:** Biochemistry and Genetics of Hypertension-Research

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 107067-10 **Title:** Determining the Effects of Genetic Variations on Blood Pressure

Personnel Added: [REDACTED]

Personnel Removed: Blair Mell, [REDACTED] and [REDACTED]

Protocol #: 108390-07 **Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (BOHB) synthesis to prevent hypertension-associated premature vascular aging

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108692-02 **Title:** Counter Regulatory Mechanisms of Cardiotonic Steroids in Cardiorenal Disease

Personnel Added: no one

Personnel Removed: Usman Ashraf, PHD, [REDACTED], Fatimah Khalaf, PHD, [REDACTED] and [REDACTED]

Protocol #: 108755-04 **Title:** The Role of Dietary Components in Metabolic Diseases and Hypertension

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108767-04 **Title:** The Mechanism of Centrosome Inheritance Pilot

Personnel Added: [REDACTED] and [REDACTED]

Personnel Removed: no one

Protocol #: 108768-02 **Title:** Breeding of TPR Mutant Mice

Personnel Added: Marziyeh Jahromi

Personnel Removed: no one

Protocol #: 108768-02 **Title:** Breeding of TPR Mutant Mice

Personnel Added: no one

Personnel Removed: Kari Neifer

Protocol #: 400056 **Title:** Effects of multiple stressors on freshwater food webs

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 400056 **Title:** Effects of multiple stressors on freshwater food webs

Personnel Added: Leslie Hintz

Personnel Removed: no one

Amendments Approved by Designated Review - 7

Protocol #: 108390-07 **Protocol Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (β OHB) synthesis to prevent hypertension-associated premature vascular aging

Summary: The purpose of this amendment is to add milk collection as a procedure in order to investigate metabolites in the milk of mothers placed on a fermentable-fiber diet. We will then be able to determine whether bile acids could be transported through milk causing subsequent cholemia and liver injury in the pups of these breeders.

Protocol #: 108390-07 **Protocol Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (β OHB) synthesis to prevent hypertension-associated premature vascular aging

Summary: Inclusion of a new drug to understand the role of autophagy in hypertension. The specific drug is Dorsomorphin dihydrochloride (synonyms: Compound C dihydrochloride; BML-275 dihydrochloride). Dorsomorphin is a putative inhibitor of AMPK and autophagy.

Protocol #: 108615-04 **Protocol Title:** Studies on The Role of Cofilin in Hemorrhagic Brain Injury

Summary: Collect poop of animals for microbiota analysis. introduce behavioral parameters to evaluate motor dysfunction following hemorrhagic stroke.

Protocol #: 108767-04 **Protocol Title:** The Mechanism of Centrosome Inheritance Pilot

Summary: This is an update to two aspects: breeding and experimentation. Upon arrival to the DLAR facility, the rabbits were quarantined and a comprehensive health screening was performed. The results indicate that the rabbits carry an opportunistic pathogen, *Pasteurella multocida*, which could result in severe disease if the rabbits are stressed or if the agent is spread to naive rabbits. The reason for amending the breeding is to obtain pigmented pathogen free rabbits. For that we will add two procedures (1) artificial insemination and (2) induction of pseudopregnancy. The reason for amending the experiment is to (1) make the rabbits more comfortable during experimentation using the sedative acepromazine and (2) analyze the vision of the rabbits in our facility.

Protocol #: 108778-02 **Protocol Title:** Rat Models of Exercise Capacity

Summary: Short-chain fatty acid supplements in LCR HCR rat models.

Protocol #: 108828-02 **Protocol Title:** Role of podocyte specific GSK-3 β in diabetic nephropathy

Summary: Based on our latest in vitro studies and on the literature, it seems that β -hydroxybutyrate, a naturally occurring endogenous metabolite in mammals, has a potent inhibitory effect on GSK3 β in podocytes. To validate this finding in vivo, we thus propose to add 50 mice to the original protocol in order to test the effect and mechanisms of β -hydroxybutyrate in diabetic kidney disease. This additional experiment will require 50 mice. The 50 mice will be divided into 5 groups of 10 mice each.

Protocol #: 108889-01 **Protocol Title:** Role of antigenicity in autoimmune diseases

Summary: To study cardiovascular and muscular physiology by CT scan.

Amendments Approved by Veterinary Verification and Consultation Review - 2

Protocol #: 108797-02 **Title:** Population status and nesting ecology of wild turtles in Ohio and Michigan

Summary: We are requesting to add 300 northern map turtles (*Graptemys geographica*) to compare diet between males and females across the oil spill gradient. Our research so far has found biased sex ratios in some stretches of the river, and because males and females have substantially different diets in this species, we want to test the hypothesis that the low number of males in some areas is due to low habitat quality that is not providing sufficient dietary resources to support males of this species.

Protocol #: 400070-01 **Title:** Effects of intermittent fasting on cancer incidence, metastasis, or treatment response

Summary: The purpose of this amendment is to add Meloxicam as an analgesic agent since there is a shortage of carprofen.

H. Adjournment

1. Meeting adjourned at 1:42 pm

University of Toledo
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Minutes
Oct-21-2020

Meeting Attendance

Member	Attended	Voting	Staff	Scientific	Affiliated
Andreana, Peter R	No	Yes	No	Yes	Yes
Arburn, Gregory	Yes	Yes	No	No	No
Bechaz, Scott Edward	Yes	Yes	Yes	No	Yes
Cicila, George Ph.D.	No	Yes	No	Yes	Yes
Eisenmann, Kathryn Maria Ph.D.	No	Yes	No	Yes	Yes
Ferreira, Viviana P. D.V.M., Ph.D.	Yes	Yes	No	Yes	Yes
Furuta, Saori Ph.D.	Yes	Yes	No	Yes	Yes
Hall, Frank Ph.D.	Yes	Yes	No	Yes	Yes
Imam, Shahnawaz Ph.D.	Yes	Yes	No	Yes	Yes
Joseph, Elaine	Yes	Yes	Yes	No	Yes
Khuder, Sadik Ph.D.	Yes	Yes	No	Yes	Yes
Liu, Guofa	Yes	Yes	No	Yes	Yes
Lorenz, Heather M. MSOH, CIH, CSP,CMLSO	No	No	Yes	No	Yes
Matson, Jyl S Ph.D.	Yes	Yes	No	Yes	Yes
Refsnider-Streby, Jeanine	Yes	Yes	No	Yes	Yes
Rohrs, Skylar Lee	No	No	Yes	No	Yes
Root, Lisa Jane	Yes	Yes	No	No	Yes
Stepkowski, Stanislaw M. Ph.D.	Yes	Yes	No	Yes	Yes
Tiwari, Amit K Ph.D.	No	Yes	No	Yes	Yes

1. Dr. Khuder joined at 12:08pm.

Chair's Remarks

1. Meeting was called to order at 12:02pm.

Old Business

1. The minutes from September were approved (12 approved, 0 opposed, 0 abstained).

New Business

1. Dr. Joseph presented modifications to the Non-Compliance Standard Operating procedure. Changes were approved (13 approved, 0 opposed, 0 abstained).

2. Dr. Hall presented the proposed changes to the IACUC protocol to address the issue of animal strain in the protocol. The changes were approved (13 approved, 0 opposed, 0 abstained).

Unexpected outcomes of research (Scott Bechaz/Lisa Root)

PROTOCOLS REVIEWED

Protocol #: 108692-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 13, Against: 0, Abstain: 0)

Protocol #: 108760-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 13, Against: 0, Abstain: 0)

Protocol #: 400091

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 13, Against: 0, Abstain: 0)

Protocol #: 400092

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Full Committee Review
(For: 13, Against: 0, Abstain: 0)

Amendments for Full Committee Review - 1

Protocol #: 108668-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the amendment including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 13, Against: 0, Abstain: 0)

Miscellaneous

PROTOCOL REPORTS

Annual Renewals Approved by Designated Review - 1

Protocol #: 108939-01 **Title:** Department Laboratory Animal Resources (DLAR) Holding Protocol 1) Joseph, Elaine;
2) None

New Protocols or Tri Annual Submission Approved by Designated Review - 2

Protocol #: 108771-03 **Title:** Breeding of MMTV-PyMT mice 1) Andreana, Peter R;
2) Joseph, Elaine

Personnel Amendments Approved by Designated Review - 21

Protocol #: 104045-19 **Title:** Blood Pressure Telemetry in Rats/Surgery Protocol
Personnel Added:
Personnel Removed: no one

Protocol #: 104573-16 **Title:** Genetics of Polygenic Traits in Rats/Breeding
Personnel Added:
Personnel Removed: no one

Protocol #: 105276-16 **Title:** Biochemistry and Genetics of Hypertension-Research
Personnel Added:
Personnel Removed: no one

Protocol #: 106448-11 **Title:** The Role of Hypothalamic Leptin and Insulin Signaling in Reproduction

Personnel Added:

Personnel Removed:

and

Protocol #: 106448-11 **Title:** The Role of Hypothalamic Leptin and Insulin Signaling in Reproduction

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108390-07 **Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (BOHB) synthesis to prevent hypertension-associated premature vascular aging

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108615-04 **Title:** Studies on The Role of Cofilin in Hemorrhagic Brain Injury

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108668-04 **Title:** Innate immune responses to virus infection

Personnel Added: Sean Ehinger

Personnel Removed: Gayatri Subramanian, PHD and [REDACTED]

Protocol #: 108668-04 **Title:** Innate immune responses to virus infection

Personnel Added: Leah Wuescher Ph.D., Randall Worth Ph.D. and [REDACTED]

Personnel Removed: no one

Protocol #: 108686-04 **Title:** Acid-sensing ion channel 1a Contributes to Synaptic Transmission and Plasticity in Ischemia

Personnel Added: no one

Personnel Removed: [REDACTED] and [REDACTED]

Protocol #: 108702-04 **Title:** Breeding and Research of ASIC knock out mice and c-fos tTA mice

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108702-04 **Title:** Breeding and Research of ASIC knock out mice and c-fos tTA mice

Personnel Added: no one

Personnel Removed: [REDACTED] [REDACTED] and [REDACTED]

Protocol #: 108778-02 **Title:** Rat Models of Exercise Capacity

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108790-02 **Title:** Interplay between Dietary Fiber and Gut Microbiota in Hepatocellular Carcinoma

Personnel Added: [REDACTED]

and [REDACTED]

Personnel Removed: no one

Protocol #: 108854-02 **Title:** Mechanism of vascular changes in rodent models of hypertension and systemic inflammation

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108855-02 **Title:** Mechanism of vascular changes in rodent models of hypertension and systemic inflammation

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108914-01 **Title:** Synaptic regulation of threat-related behaviors

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108940-01 **Title:** Empathy and developmental pesticide exposure in mice

Personnel Added: Lauren Dennie, Sweta Desai, Jonathan Carlson, Kareem Zade and Louis Mauro

Personnel Removed: [REDACTED]

and [REDACTED]

Protocol #: 108941-01 **Title:** Empathy and developmental pesticide exposure in prairie vole

Personnel Added: [REDACTED]

and [REDACTED]

Personnel Removed: no one

Protocol #: 108941-01 **Title:** Empathy and developmental pesticide exposure in prairie vole

Personnel Added: [REDACTED]

[REDACTED], [REDACTED], [REDACTED]

and [REDACTED]

[REDACTED]

Personnel Removed: [REDACTED]

Protocol #: 400069-01 **Title:** COVID-19: Oxytocin treatment for murine coronavirus infection in mouse

Personnel Added: [REDACTED] and [REDACTED]

Personnel Removed: no one

Amendments Approved by Designated Review - 6

Protocol #: 108390-07 **Protocol Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (β OHB) synthesis to prevent hypertension-associated premature vascular aging

Summary: We would like to add 5-aminosalicylate (5-ASA) to the existing protocol to test the effect of this reagent on blood pressure and the gut microbiota.

Protocol #: 108658-04 **Protocol Title:** Role of nitric oxide in regulating breast cancer microenvironment

Summary: For monitoring mammary tumor growth and measuring tumor size, we will include the use of an ultrasound system (Visualsonics Vevo 770) which is going to be purchased by the PI's laboratory. The additional use of an ultrasound is to resolve the difficulties researchers faced during their previous trial by resorting to less sensitive methods to detect tumor onset (palpation) and to monitor tumor growth (caliper measurement) of transgenic animals.

Protocol #: 108790-02 **Protocol Title:** Interplay between Dietary Fiber and Gut Microbiota in Hepatocellular Carcinoma

Summary: This amendment is to add a new protocol for shaving mice and applying Nair® to remove hair. This procedure will be performed as a preparatory step before mice are imaged with IVIS imager (this imaging protocol has been approved previously). Hence, no additional animals are requested in this amendment.

Protocol #: 108806-02 **Protocol Title:** Evaluating the effect of RKIP gene deletion on breast cancer in genetically modified mice

Summary: To amend a procedure to detect tumors with an ultrasound system (Visualsonics Vevo 70) in our department purchased by Dr. Saori Furuta.

Protocol #: 108864-01 **Protocol Title:** Inhibiting BRD9 in Melanoma

Summary: The purpose of this amendment is to use the drug, PLX4720 for our studies. This is a BRAF inhibitor that has been used in other studies for the experiments we would like to follow up on. One such study is by Abel et al, JCI, 2013.

Protocol #: 400067

Protocol Title: Influence of bone microenvironment in cancer bone metastases

Summary: The purpose of this amendment is to add castration surgery to our protocol. Prostate cancer treatment includes castration surgery in severe cases, so this is necessary for our research model.

Amendments Approved by Veterinary Verification and Consultation Review - 1

Protocol #: 108658-04

Title: Role of nitric oxide in regulating breast cancer microenvironment

Summary: We are going to have a training for our newly purchased ultrasound (VisualSonics Vevo 770) by the technical support staff, Vahagn Ohanyan, MD, PhD, from BMR Supply on 9/10/20 (R) and 9/11/20 (F). We would like to use 6 female mice provided by DLAR for this training.

H. Adjournment

1. Meeting was adjourned at 2:20pm.

University of Toledo
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Minutes
Nov-18-2020

Meeting Attendance

Member	Attended	Voting	Staff	Scientific	Affiliated
Andreana, Peter R Ph.D.	Yes	Yes	No	Yes	Yes
Arburn, Gregory Ph.D.	Yes	Yes	No	No	No
Bechaz, Scott Edward LATg	Yes	Yes	Yes	No	Yes
Cicila, George Ph.D.	Yes	Yes	No	Yes	Yes
Eisenmann, Kathryn Maria Ph.D.	Yes	Yes	No	Yes	Yes
Ferreira, Viviana P. D.V.M., Ph.D.	Yes	Yes	No	Yes	Yes
Furuta, Saori Ph.D.	Yes	Yes	No	Yes	Yes
Hall, Frank Ph.D.	Yes	Yes	No	Yes	Yes
Imam, Shahnawaz Ph.D., D.V.M.	Yes	Yes	No	Yes	Yes
Joseph, Elaine Ph.D.	Yes	Yes	Yes	No	Yes
Khuder, Sadik Ph.D.	Yes	Yes	No	Yes	Yes
Liu, Guofa Ph.D.	Yes	Yes	No	Yes	Yes
Lorenz, Heather M. MSOH, CIH, CSP,CMLSO	No	No	Yes	No	Yes
Matson, Jyl S Ph.D.	Yes	Yes	No	Yes	Yes
Refsnider-Streby, Jeanine Ph.D.	Yes	Yes	No	Yes	Yes
Rohrs, Skylar Lee	No	No	Yes	No	Yes
Root, Lisa Jane D.V.M.	Yes	Yes	No	No	Yes
Stepkowski, Stanislaw M. Ph.D.	Yes	Yes	No	Yes	Yes
Tiwari, Amit K Ph.D.	No	Yes	No	Yes	Yes

1. Mr. Bechaz and Dr. Stepkowski arrived at 12:05pm
2. Dr. Andreana left at 12:57pm

Chair's Remarks

1. The meeting was called to order at 12:00pm

Old Business

New Business

1. The minutes from the October meeting were approved (14 for, 0 against, 0 abstained).
2. The revised IACUC Guidelines were all approved (16 for, 0 against, 0 abstained).

3. [REDACTED] suspension from DLAR access was lifted and full access was reinstated. (16 for, 0 against, 0 abstained).

Unexpected outcomes of research (Scott Bechaz/Lisa Root)

PROTOCOLS REVIEWED

Protocol #: 105276-17

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 16, Against: 0, Abstain: 0)

Protocol #: 106448-13

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 16, Against: 0, Abstain: 0)

Protocol #: 108782-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

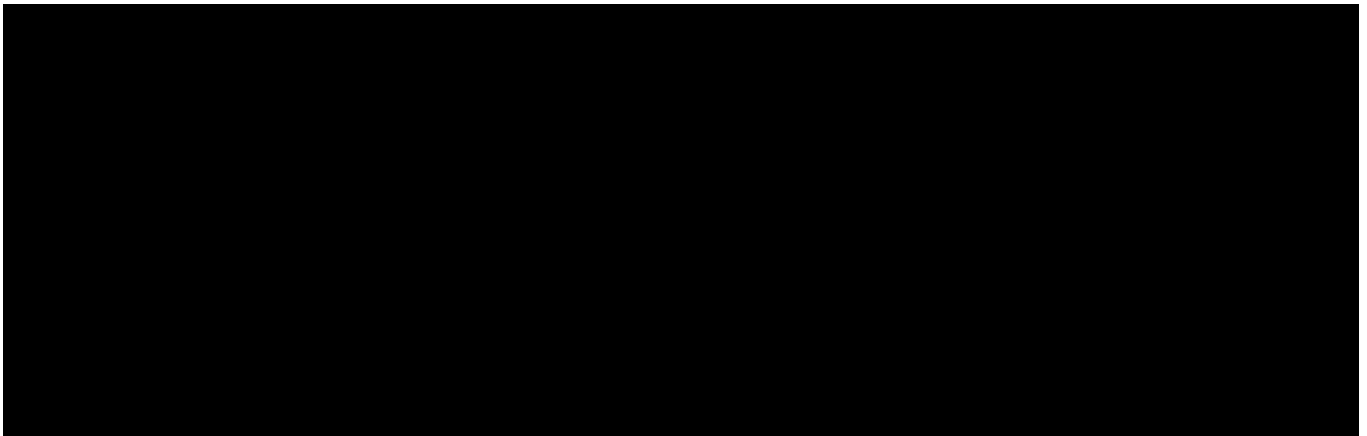
Committee Action: Modifications Required followed by Designated Member Review
(For: 15, Against: 0, Abstain: 0)

Protocol #: 400093

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Full Committee Review
(For: 15, Against: 0, Abstain: 0)



Protocol #: 400095

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Full Committee Review
(For: 15, Against: 0, Abstain: 0)

Protocol #: 400092

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 15, Against: 0, Abstain: 0)

Amendments for Full Committee Review - 0

Miscellaneous

PROTOCOL REPORTS

Annual Renewals Approved by Designated Review - 0

New Protocols or Tri Annual Submission Approved by Designated Review - 2

Protocol #: 108768-04	Title: Breeding of TPR Mutant Mice	1) Joseph, Elaine; 2) Furuta, Saori Ph.D.
Protocol #: 400089	Title: Breeding of Smarca4 conditional knockout mice	1) Stepkowski, Stanislaw M. Ph.D.; 2) Liu, Guofa

Personnel Amendments Approved by Designated Review - 27

Protocol #: 103714-19 **Title:** Host-Pathogen Interaction in Lyme Disease
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 103714-19 **Title:** Host-Pathogen Interaction in Lyme Disease
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 104045-19 **Title:** Blood Pressure Telemetry in Rats/Surgery Protocol
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 104045-19 **Title:** Blood Pressure Telemetry in Rats/Surgery Protocol
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 104573-16 **Title:** Genetics of Polygenic Traits in Rats/Breeding
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 104573-16 **Title:** Genetics of Polygenic Traits in Rats/Breeding
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 105276-16 **Title:** Biochemistry and Genetics of Hypertension-Research
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 105276-16 **Title:** Biochemistry and Genetics of Hypertension-Research
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 106916-10 **Title:** Francisella Tularensis Intracellular-induced Outer Membrane Proteins
Personnel Added: Ronald Wooten Ph.D.
Personnel Removed: Chad Burkholder and Jennifer Ten Eyck

Protocol #: 107166-10 **Title:** Immunological Responses to Francisella Tularensis Antigens and Infection
Personnel Added: Ronald Wooten Ph.D.
Personnel Removed: no one

Protocol #: 107556-08 **Title:** Nicotinic Acid Adenine Dinucleotide 2'-Phosphate in Lymphocytes
Personnel Added: Shadia Nada Ph.D. and [REDACTED]
Personnel Removed: no one

Protocol #: 107556-09 **Title:** Nicotinic Acid Adenine Dinucleotide 2'-Phosphate in Lymphocytes
Personnel Added: Shadia Nada Ph.D.
Personnel Removed: no one

Protocol #: 108390-07 **Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (BOHB)

synthesis to prevent hypertension-associated premature vascular aging

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108390-07 **Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (BOHB) synthesis to prevent hypertension-associated premature vascular aging

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108591-07 **Title:** Testing tumor susceptibility in rat models of hypertension- Decreased autophagy leads to proteotoxicity and senescence in hypertension-associated premature vascular aging

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108668-04 **Title:** Innate immune responses to virus infection

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108677-04 **Title:** Aspartame and Experimental Autoimmune Encephalomyelitis

Personnel Added: no one

Personnel Removed: Heather Conti, [REDACTED] and [REDACTED]

Protocol #: 108717-04 **Title:** Breeding Fc γ mmR Transgenic Mice

Personnel Added: Shadia Nada Ph.D.

Personnel Removed: no one

Protocol #: 108755-04 **Title:** The Role of Dietary Components in Metabolic Diseases and Hypertension

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108755-04 **Title:** The Role of Dietary Components in Metabolic Diseases and Hypertension

Personnel Added: Nicole Bearss, [REDACTED], [REDACTED] and [REDACTED]

Personnel Removed: no one

Protocol #: 108778-02 **Title:** Rat Models of Exercise Capacity

Personnel Added: Marwin Li

Personnel Removed: no one

Protocol #: 108790-02 **Title:** Interplay between Dietary Fiber and Gut Microbiota in Hepatocellular Carcinoma

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 108928-01 **Title:** The effect of weekly low dose lithium chloride treatment on kidney aging

Personnel Added: Bohan Chen

Personnel Removed: [REDACTED]

Protocol #: 400049 **Title:** Vaccines Targeting Glycoproteins

Personnel Added: Shadia Nada Ph.D., [REDACTED] and [REDACTED]

Personnel Removed: no one

Protocol #: 400050 **Title:** Interactions of *B. burgdorferi* and immune cells in murine skin tissues (#105982)

Personnel Added: [REDACTED]

Personnel Removed: no one

Protocol #: 400050 **Title:** Interactions of *B. burgdorferi* and immune cells in murine skin tissues (#105982)

Personnel Added: [REDACTED]

Personnel Removed: [REDACTED]

Protocol #: 400069-01 **Title:** COVID-19: Oxytocin treatment for murine coronavirus infection in mouse

Personnel Added: [REDACTED]

Personnel Removed: no one

Amendments Approved by Designated Review - 10

Protocol #: 105414-14 **Protocol Title:** Chemical Exposure and Development in the zebrafish, *Danio rerio*

Summary: want to add two chemicals to protocol. CDD102A, BQCA. These are acetylcholine active compounds and therefore are neurological.

Protocol #: 105599-13 **Protocol Title:** Bone loss with aging occurs due to increased PPAR γ activity in marrow stem cells

Summary: To study whether genetic manipulation with PPAR γ and PPAR α expression in osteocytes creates an environment in bone which is permissive for prostate cancer metastasis.

Protocol #: 107067-10 **Protocol Title:** Determining the effects of genetic variations on blood pressure

Summary: This amendment is to have slight modifications to the surgical protocol to enhance comfort and survival of post-operative mice. It is also intended to add Cevimeline, a muscarinic agonist, to assess its effect on blood pressure.

Protocol #: 108390-07 **Protocol Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (β OHB) synthesis to prevent hypertension-associated premature vascular aging

Summary: We would like to add oxytocin to the protocol to be given to the dam before the milk collection procedure.

Protocol #: 108658-04 **Protocol Title:** Role of nitric oxide in regulating breast cancer microenvironment

Summary: We would like to utilize IVIS system to visualize tumor growth/metastasis with the fluorescent dye 2-DG-750 (PerkinElmer, Inc.) that accumulates in tumors.

Protocol #: 108754-01 **Protocol Title:** Effects of Glucocorticoid Agonists on Adipose Tissue Metabolism

Summary: The purpose of this amendment is to overnight fast the mice 12 to 16 hours prior to tissue harvest.

Protocol #: 108790-02 **Protocol Title:** Interplay between Dietary Fiber and Gut Microbiota in Hepatocellular Carcinoma

Summary: The purpose of this amendment is to include the usage of the hormone, oxytocin, for stimulation of milk secretion for our breeder milk study.

Protocol #: 400067 **Protocol Title:** Influence of bone microenvironment in cancer bone metastases

Summary: The purpose of this amendment is to add orthotopic (prostate) cancer cell injection to this protocol.

Protocol #: 400069-01 **Protocol Title:** COVID-19: Oxytocin treatment for murine coronavirus infection in mouse

Summary: Additional MHV-A59 experiment to establish a dose-response curve for clinical symptoms with the murine coronavirus.

Amendments Approved by Veterinary Verification and Consultation Review - 2

Protocol #: 108677-04 **Title:** Aspartame and Experimental Autoimmune Encephalomyelitis

Summary: Fix a couple of answers

Protocol #: 400067 **Title:** Influence of bone microenvironment in cancer bone metastases

Summary: The purpose of this amendment is to add subcutaneous injection of human cancer cells to this protocol.

H. Adjournment

1. The meeting was adjourned at 2:20pm

University of Toledo
INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE

Minutes
Dec-08-2020

Meeting Attendance

Member	Attended	Voting	Staff	Scientific	Affiliated
Andreana, Peter R	Yes	Yes	No	Yes	Yes
Arburn, Gregory	Yes	Yes	No	No	No
Bechaz, Scott Edward	Yes	Yes	Yes	No	Yes
Cicila, George Ph.D.	Yes	Yes	No	Yes	Yes
Eisenmann, Kathryn Maria Ph.D.	Yes	Yes	No	Yes	Yes
Ferreira, Viviana P. D.V.M., Ph.D.	No	Yes	No	Yes	Yes
Furuta, Saori Ph.D.	No	Yes	No	Yes	Yes
Hall, Frank Ph.D.	Yes	Yes	No	Yes	Yes
Imam, Shahnawaz Ph.D.	Yes	Yes	No	Yes	Yes
Joseph, Elaine	Yes	Yes	Yes	No	Yes
Khuder, Sadik Ph.D.	Yes	Yes	No	Yes	Yes
Liu, Guofa	Yes	Yes	No	Yes	Yes
Lorenz, Heather M. MSOH, CIH, CSP,CMLSO	No	No	Yes	No	Yes
Matson, Jyl S Ph.D.	Yes	Yes	No	Yes	Yes
Refsnider-Streby, Jeanine	Yes	Yes	No	Yes	Yes
Rohrs, Skylar Lee	Yes	No	Yes	No	Yes
Root, Lisa Jane	Yes	Yes	No	No	Yes
Stepkowski, Stanislaw M. Ph.D.	Yes	Yes	No	Yes	Yes
Tiwari, Amit K Ph.D.	Yes	Yes	No	Yes	Yes

1. Mr. Bechaz and Dr. Stepkowski arrived at 1:08pm.
2. Dr. Imam left at 2:07pm.
3. Dr. Hall was out from 2:07-2:28pm.
4. Dr. Andreana left at 2:41pm.

Chair's Remarks

1. Meeting was called to order at 1:02pm.

Old Business

1. The minutes from the November meeting were approved (13 approved, 0 opposed, 0 abstained).

New Business

1. The new Guideline on Drug Dilutions was discussed and will be tabled until January.

Unexpected outcomes of research (Scott Bechaz/Lisa Root)

PROTOCOLS REVIEWED

Protocol #: 100621-31

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

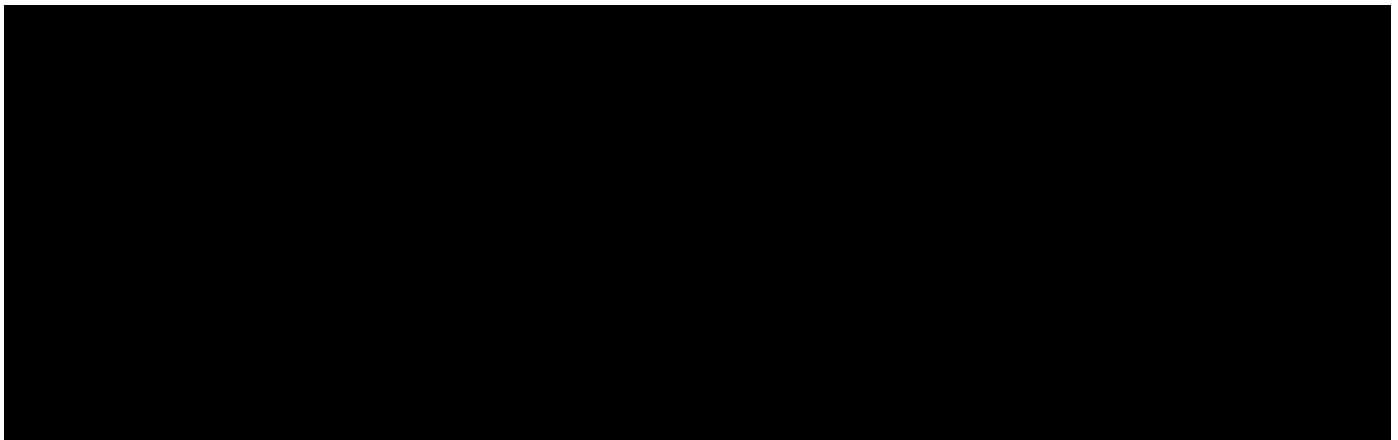
Committee Action: Modifications Required followed by Designated Member Review
(For: 14, Against: 0, Abstain: 0)

Protocol #: 106377-13

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Approved
(For: 13, Against: 0, Abstain: 0)



Protocol #: 108782-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 15, Against: 0, Abstain: 0)

Protocol #: 108789-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 13, Against: 0, Abstain: 0)

Protocol #: 108790-04

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Full Committee Review
(For: 13, Against: 0, Abstain: 0)

Protocol #: 400097

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 12, Against: 0, Abstain: 0)

Protocol #: 400093

Committee discussion and deliberation included the following topics:

1. There was discussion/questions regarding various aspects of the protocol including experiments, procedures, animal numbers, substances, etc.

Committee Action: Modifications Required followed by Designated Member Review
(For: 12, Against: 0, Abstain: 0)

Amendments for Full Committee Review - 0

Miscellaneous

PROTOCOL REPORTS

Annual Renewals Approved by Designated Review - 1

Protocol #:	Title:	1) Tiwari, Amit K Ph.D.;
108929-01	Children's talk about an interactive health and safety event	2) None

New Protocols or Tri Annual Submission Approved by Designated Review - 2

Protocol #:	Title: Effects of Glucocorticoid Agonists on Adipose Tissue Metabolism	1) Imam, Shahnawaz Ph.D.;
108754-04		2) Joseph, Elaine
Protocol #:	Title: Role of CXCR4-LASP1 axis in breast cancer progression and metastasis	1) Ferreira, Viviana P. D.V.M., Ph.D.;
108760-04		2) Liu, Guofa

Personnel Amendments Approved by Designated Review - 10

Protocol #: 103714-19 **Title:** Host-Pathogen Interaction in Lyme Disease

Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 108615-04 **Title:** Studies on The Role of Cofilin in Hemorrhagic Brain Injury
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 108658-04 **Title:** Role of nitric oxide in regulating breast cancer
microenvironment
Personnel Added: Daniel Fackelman
Personnel Removed: no one

Protocol #: 108668-04 **Title:** Innate immune responses to virus infection
Personnel Added: Kari Neifer and [REDACTED]
Personnel Removed: no one

Protocol #: 108686-04 **Title:** Acid-sensing ion channel 1a Contributes to Synaptic
Transmission and Plasticity in Ischemia
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 108854-02 **Title:** Mechanism of vascular changes in rodent models of
hypertension and systemic inflammation
Personnel Added: Jeremy Tomcho MD
Personnel Removed: no one

Protocol #: 108889-01 **Title:** Role of antigenicity in autoimmune diseases
Personnel Added: Johnathon Durgala
Personnel Removed: Sivarajan Kumarasamy Ph.D., Gayatri Subramanian, PHD and Guannan Zhou

Protocol #: 108940-01 **Title:** Empathy and developmental pesticide exposure in mice
Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 400050 **Title:** Interactions of B. burgdorferi and immune cells in murine skin
tissues (#105982)

Personnel Added: [REDACTED]
Personnel Removed: no one

Protocol #: 400091 **Title:** Zebrafish screen for autism spectrum disorders treatments
Personnel Added: Alexander Wisner, PHD
Personnel Removed: no one

Amendments Approved by Designated Review - 7

Protocol #: 105414-14 **Protocol Title:** Chemical Exposure and Development in the zebrafish, *Danio rerio*
Summary: I would like to add fentanyl to the list of chemicals tested on the protocol.

Protocol #: 108390-07 **Protocol Title:** Investigation of the relationship between the gut microbiome and blood pressure- Autophagy regulates β -hydroxybutyrate (β OHB) synthesis to prevent hypertension-associated premature vascular aging
Summary: We would like to add the following bacteria to be given to the rats by oral gavage: *Coprococcus comes*, *Coprococcus euctactus* and *Veillonella parvula*.

Protocol #: 108928-01 **Protocol Title:** The effect of weekly low dose lithium chloride treatment on kidney aging
Summary: The purpose of this amendment is to examine how lithium treatment regulates the activity of GSK3 β , a major molecular target of lithium, and if GSK3 β plays a role in age-related kidney changes, including cell cycle, senescence, and senescence-associated secretory phenotype (SASP).

Protocol #: 108940-01 **Protocol Title:** Empathy and developmental pesticide exposure in mice
Summary: We are amending perfusion procedures to allow for perfusions within your laboratory space.

Protocol #: 108941-01 **Protocol Title:** Empathy and developmental pesticide exposure in prairie vole
Summary: We are amending the perfusion procedures to allow for perfusion in our laboratory space.

Protocol #: 400051 **Protocol Title:** AUTONOMIC NERVE TRACING AND FUNCTION

Summary: The purpose of the amendment is to broaden the study to include the neural control of other organs. By expanding our approach to nerve tracing and functional measurements in the autonomic nervous system, the amended study will provide new and important data that will better comport with the aims of a recently awarded R01.

Protocol #: 400069-01 **Protocol Title:** COVID-19: Oxytocin treatment for murine coronavirus infection in mouse

Summary: We are requesting an amendment to increase the range of viral doses for the murine coronavirus dose study. The new dose range was determined in consultation with Dr. Chattopadhyay and Dr. Taylor.

Amendments Approved by Veterinary Verification and Consultation Review - 0

H. Adjournment

1. Meeting was adjourned at 2:55pm.