



**Center for Transformative Research in Metabolism
External Advisory Committee Virtual Meeting (EAC)**

May 12 and May 13, 2022

9:00 a.m. to 12:45 p.m. ([AST Day 1](#)) and 9:00 a.m. to 1:00 p.m. ([AST Day 2](#))

EAC Meeting Agenda

Meeting Objectives:

1. Discuss TRiM's renewal COBRE application due on Tuesday, September 27, 2022 for Phase 2. COBRE Renewal PAR: <https://grants.nih.gov/grants/guide/pa-files/PAR-22-163.html>.
2. Share updates regarding proposal submissions from TRiM research project and pilot project leaders.
3. Present preliminary draft Specific Aims for Cores and proposed timelines for the COBRE renewal.
4. Discuss planning for the August EAC meeting.

Desired Outcomes:

1. EAC input regarding proposed plans for the COBRE Phase 2 proposal and guidance for submitting a successful application.
2. EAC input on the proposed new grant submissions by TRiM's RPLs and PPLs and recommendations.

Thursday, May 12, 2022

- 9:00 a.m. *Welcome - Setting the Stage for the May 2022 EAC meeting: Recent updates on TRiM accomplishments and plans going forward for the COBRE renewal and Research Project Leaders*
Dr. Kelly Drew, Center Director
- 9:30 a.m. *Health and Metabolism Research Core (HaMR), UAF*
Carl Murphy, PhD, Core Leader and Molecular Imaging Facility Manager
HaMR Core Key Personnel: Oivind Toien, PhD, Manager, Animal Instrumentation;
Scott Jerome, PhD, Research Navigator; Jim Janoso, Manager, Microscopy/Histology Facility; Pat Rivera, Histology Technician/Microscopy Support; Hoshi Sugiura, Manager, Animal Support
- 10:00 a.m. *LC-MS Orbitrap: ASET, UAA*
Pat Tomco, PhD, Leader
- 10:30 a.m. *Advanced Instrumentation in Microbiome Studies (AIMS Core), UAA*
Brandon Briggs, PhD, Core Leader
AIMS Core Key Personnel: Kirsten Grond, PhD, Bioinformatician and Eric Henderson, B.S. Lab Manager



- 11:00 a.m. Break
- 11:30 a.m. *Admin Core, UAF*
Kelly Drew, PhD, Core Leader
Admin Core Key Personnel: Denise Daniello, M.A., Program Coordinator and Sarah Zieschang, M.A., Admin Assistant
- 12:00 p.m. *Center for TRiM Evaluation: GY03 Outcomes and plans for COBRE Renewal*
Jen Danielson, External Evaluator, Goldstream Group
- 12:30 p.m. Wrap-Up of Day 1
- 12:45 p.m. Break for the Day



Friday, May 13, 2022

9:00 a.m. Welcome back and debrief of Day 1
Kelly Drew, PhD, Center Director

Research and Pilot Project Leaders, New Proposal Submissions

9:15 a.m. *Post-Transcriptional Mechanisms of Muscle Atrophy Prevention in Hibernating Mammals, Project 1, UAF*

PI Vadim Fedorov, PhD, Research Associate Professor, UAF

Advisor: Esther Dupont-Versteegden, PhD, Director of the Rehabilitation Sciences Doctoral Program, Professor College of Health Sciences Department of Physical Therapy, University of Kentucky

- *Significance of post transcriptional gene regulation for muscle preservation during immobility of hibernation*, NIH National Institute of Arthritis and Musculoskeletal and Skin Diseases, R01, to be submitted June 5, 2022.

9:45 a.m. *Microbial Provision of Essential Amino Acids: Protein Conservation in Hibernation, Project 2, UAA*

PI Khrys Duddleston, PhD, Director, Department of Biological Sciences and Professor of Biology, UAA

Advisor/Collaborator: Loren Buck, PhD, Professor of Biological Sciences, Northern Arizona University

Key Personnel: Kirstin Grond, PhD, Project 2 Postdoc

- *Harnessing the hibernator gut microbiota: An innovative and feasible approach to reduce risk and improve health outcomes during and following synthetic torpor*. NASA TRiSH-BRASH Preliminary Proposal submitted 1.26.2022.
- *Toward microbial intervention for muscle mass loss: The role of the gut microbiome in essential amino acid synthesis*. NIH-NIDDK R01 submitted 2.7.2022.
- *Microbiota and inflammation in adiposity: The ground squirrel model*. NIH-NIGMS- GM124586 (R15 AREA Award), competitive renewal. Submitted 2.25.2022

10:15 a.m. Break

10:30 a.m. *Adaptations of Sleep and Cardiac Rhythms in the Hypometabolic State of a Human Sized Hibernator*

PI Oivind Toien, PhD, Research Assistant Professor, UAF

Advisor/Collaborator: Craig Heller, PhD, Professor of Biology, Stanford University

- *Working Title, R01: Adaptations of Sleep and Cardiac Rhythms in the Hypometabolic State of a Human Sized Hibernator*, NIH Heart, Lung and Blood Institute, June 5, 2022 submission.

- 11:00 a.m. *Molecular mechanisms underlying skeletal muscle temporal dynamics in a hibernating mammal as a pathway to peripheral artery disease intervention, Pilot Project*
PI Anya Goropashnaya, PhD, Research Assistant Professor, UAF
Advisor: Esther Dupont-Versteegden, PhD, Director of the Rehabilitation Sciences Doctoral Program, Professor College of Health Sciences Department of Physical Therapy, University of Kentucky.
- *Working Title, R01: Molecular mechanisms underlying skeletal muscle temporal dynamics in a hibernating mammal as a pathway to peripheral artery disease intervention*, NIH Heart, Lung and Blood Institute, June 5, 2022 submission
- 11:30 a.m. *Vitamin D and Healthy Aging: Establishing the Sled Dog Sentinel for the Circumpolar North, Pilot Project*
PI Kriya Dunlap, PhD, Associate Professor of Biochemistry, UAF
Advisor: Daniel Promislow, PhD, Professor, Department of Laboratory Medicine & Pathology, University of Washington, Seattle, Co-Director and PI, Dog Aging Project
Key Personnel: Scott Jerome, PhD, Project Postdoc
- *Working Title, R03: Vitamin D and Healthy Aging: Establishing the Sled Dog Sentinel for the Circumpolar North*, NIH National Institute on Aging, June 16, 2022 submission
- 12:00 pm. *EAC August 8-11, 2022 Meeting*
Overall Purpose - Kelly Drew, Center Director
Travel Logistics – Sarah Zieschang, Admin Assistant
- 12:45 p.m. *Final thoughts and concluding remarks*
- 1:00 p.m. Adjourn – Thank you!