



UA Center for Transformative Research in Metabolism (TRiM)

Internal Steering Committee Meeting (ISC)

Friday, July 8, 2022

12:00 to 1:00 p.m.

<https://alaska.zoom.us/j/899633093>

Meeting Objectives: (1) Discuss EAC Report, May 2022; (2) Review TRiM's Annual Evaluation Report; and (3) Discuss, revise and approve the draft EAC August meeting agenda, in-person and virtual UAF and UAA meeting.

- 12:00 p.m. Welcome All: Chair Khrys Duddleston, PhD
- 12:05 p.m. Review and act on ISC draft meeting agenda, 7.8.2022. Any changes?
- 12:05 p.m. Review and act on ISC draft meeting minutes, 4.29.2022. Any changes?
- 12:10 p.m. Old Business
- NIH COBRE Renewal and the NIA PO1 Center Grant – Kelly Drew, PhD
- 12:20 p.m. New Business
- Discuss EAC Report, May 2022 (attached) (10 minutes) – Khrys Duddleston, PhD
 - TRiM External Evaluation Report, GY03 – Jen Danielson, Goldstream Group (15 minutes)
 - Discuss and take action on EAC draft agenda, August 8-12, 2022: (15 minutes)
 - Draft meeting goals – Review, discussion. Any revisions?
 - Day 1, Monday, August 8 (UAF campus) – Review, discussion. Any revisions?
 - Day 2, Tuesday, August 9 (Train ride to Denali and professional development conversations) – Review, discussion. Any revisions?
 - Day 3, Wednesday, August 10 (Denali to Anchorage, train ride, professional development conversations)
 - Day 4, Thursday, August 11, UAA campus
 - Day 5, Friday, August 12, UAA campus
 - Take action (approve/disapprove) of the following agenda items by poll for each EAC meeting day by poll voting:
 - Draft EAC August Meeting goals and desired outcomes
 - Day 1, August 8
 - Day 2, August 9
 - Day 3, August 10
 - Day 4, August 11
 - Day 5, August 12

12:55 p.m. TRiM's Annual Retreat

We are looking forward to the next TRiM annual retreat. Through poll voting, please indicate your preference for participation in the next annual retreat.

- Joint AK INBRE annual retreat:
- TRiM retreat only
- Either way would work for me

12:56 p.m. Share announcements for research projects and cores (as time allows) - All are invited to share.

1:00 p.m. Adjourn

Next ISC meeting, Friday, September 16, 2022, 12:00 p.m. to 1:00 p.m. Note: If you would like to present an update at the September ISC meeting, please let Khrys and/or Denise know. Thank you!

**Center for Transformative Research in Metabolism (TRiM)
Internal Steering Committee Meeting (ISC), Draft Minutes
Friday, April 29, 2022, 12:00 to 1:00 p.m., Virtual Meeting**

Call to order: Khrys Duddleston welcomed all and called the meeting to order at 12:03 p.m.

- I. **Attendance:** UAA representatives present included Khrys Duddleston, PhD, ISC Chair, PI Project 2 and Brandon Briggs, AIMS Core Leader. UAF representatives were Kelly Drew, PhD, TRiM Director; Sarah Zieschang, TRiM Admin. Assistant; PI Project 1; Carl Murphy, PhD, HaMR Core Leader and MIF Manager; Oivind Toien, PhD, HaMR Core and Pilot Project PI; Anya Goropashnaya, PhD, Pilot Project PI; Pat Rivera, HaMR Core; Matthew Cho, PhD; Jen Danielson, Goldstream Group

II. Agenda, 04.29.2022: Carl motioned to approve the agenda and Brandon seconded the motion. No opposition.

III. Draft Minutes, 03.25.2022: A motion to approve the minutes was made by Brandon and seconded by Carl with no objections. No opposition.

IV. Old Business:

Thanks to Sarah for writing minutes. For polls, there should be an abstain option for the minutes.

We did an error check for RPPR and submitted it this morning. Next year good to add student assistants and count them as students, just to show we have student involvement with projects, which means they need to have an eRA Commons ID. Kelly will submit SIRS report after some last changes later this afternoon. Hopefully, there will be no problems with it.

Kelly thanked everyone for participating and also thanked Piestar. Recognition was also given to Sarah for data entry.

V. New Business: EAC May Meeting

Denise presented the plan for EAC May meeting. We are supposed to have two meetings with one meeting halfway through the year. The May meeting is the second meeting of the year for GY3.

COBRE Renewal

COBRE renewal is due September 27. There are links to the Google Drive for COBRE renewal in the Agenda.

EAC May Meeting

Day 2 will discuss proposal submissions for TRiM research project and pilot project leaders for discussions for EAC. 30 minutes is allotted per person for their presentation to discuss specific aims, application submitted to, and general plans. Presenters should use the time they need and not go over 30 minutes; however, using less time is okay as we might get behind during other parts of the meeting.

Day 1 will focus on the Cores and plans for the COBRE renewal specific aims for the renewal, what was the SA for previous proposals, proposed timelines, and plans for the August EAC meetings.

There was discussion about if Pat Tomco will be here for the May meeting as Brandon wants to bring him in more for the AIMS Core. At this time, Pat Tomco will be there for the May meeting. The flow will be Carl, AIMS

core, Pat Tomco, and then a break. After the break, the Admin core will talk, wrap up the meeting and break for the day around 12:45.

Discussion about Day 2 of the May EAC meeting included mentions of Vadim and Oivind submitting R01s in June along with Anya submitting an application to Heart, Lung, and Blood. Jen Danielson was moved to Day 2 at noon for discussion about Evaluation for Grant Year 3. Additionally, Sarah will provide information on travel logistics for the August EAC Meeting.

For reporting, the EAC is required to submit a report to NIH. The Admin core will help with any assistance. We will submit as soon as we have it and hopefully before the next ISC meeting in order to review it during the ISC meeting.

Discussion occurred for who should talk first during the May EAC meeting for Carl and Pat Tomco. TRiM would like to make AIMS core more stable and promote access to metabolomics. It is important to maintain structures while not adding cores. Brandon and Pat should have a meeting to talk about organizational structure. Other mechanism links were sent to Brandon by Kelly.

The draft EAC agenda was presented. There were a few ideas to change wording from preliminary to preliminary drafts for specific aims for the cores.

Day 1 poll consisted of approving the first day of the EAC meeting with the edit to move Pat Tomco before AIMS and adding Jen's presentation at noon. Day 1 will run a half hour later than Day 2 due to this. Poll voting showed 7 yes's, zero no's, and one unsure if they should be voting.

Day 2 poll consisted of approving the second day of the EAC meeting with the edit of having no Jen presentation and ending a half hour early resulted in 7 yeses and zero no's.

IAB Open House:

The IAB Open house is an outreach event occurring on May 19, 2022, from 4-7pm. The purpose of the open house is to connect what we do to state needs. Alaska has the fastest growing aging population. A lot of the hibernation research looks as either resistance or regeneration. A theme that we're developing as a way to communicate to our legislators and the state at large that hibernation is our discovery platform of identifying novel adaptations with mechanisms that could then be harnessed for therapeutic purposes.

Kelly will not be there. There was a question posed by Kelly if UAA had anything like the open house. Khrys mentioned that it is happening in October for UAA.

The open house committee is currently composed of Denise, Carl, Pat, and whoever else wants to join. A potential meeting date of Thursday, May 5, 2022, was proposed. Current ideas include Jim Janoso setting up a fluorescent microscope, Carl providing tours of MIF, a presentation for AIMS, Anya's images of muscle fiber types, Hoshi showing instruments for animal surgery and a table for learning to do sutures. The proposed backdrop is TRiM's new poster that was presented at the American Society on Aging Conference.

Reporting Feedback

Kelly gave huge thanks to Denise and Sarah for reporting and asked for any feedback. It was very helpful using people's CV's. (Khrys clapped.)

If any student gets paid more than 1 month, then they need an eRA commons number.

Team reporting in Piestar is turned on. Publications in review aren't submitted to RPPR. Some issues with Piestar may not necessarily be only with our team, so it's good to give feedback in case other teams have the same issues. Piestar does not have the ability to view across cores and projects.

Kelly gave thanks to Pat and AJ for their role in reporting. Pat mentioned that going through CVs and proposal numbers are helpful for going back and looking at the funding agency. Especially for Khrys's funding, which went through the Alaska SeaLife. Pat mentioned to put dates and any type of ID#. There are lots of opportunities to put information in Piestar. Lots of titles overlap, so it's important to put that information in and publish, the names are not enough.

Oivind asked why we even have a deadline, because once the deadline passes it is impossible to see your own information any longer. To address this, Sarah mentioned that she can extend the deadline until the May EAC meeting.

Carl also mentioned that he can't look at what had been done last year. Some of the information would auto-populate and some that auto-populated was not needed. There were also inconsistencies with what was filled in, some blank, and lots of confusion. Carl had to go through Denise to see what was inputted last year.

Khrys echoed what Carl noticed. Certain parts seemed redundant as you would enter the same information multiple times. Some of the sections should be revised to eliminate redundancy.

Kelly mentioned that one of the goals of the Admin/TRiM is to try to synergize and integrate effort and share information between INBRE and TRiM. With this, the goal is that all reporting can be populated within the Admin Core. There was discussion about what Khrys uses for Annual Activity reports. Khrys still uses pen and paper. The interface is tedious. Khrys said that teaching, service, etc. is all separate. Khrys mentioned that funding for the jumping mice is coming up in order to put mice on plane.

Brandon mentioned it would be good to also think about the questions for the cores versus projects.

ISC Meeting

The next ISC meeting was moved from June 3, 2022, to July 8, 2022. Brandon won't be able to join as he will be in the middle of the Aleutian Islands. Khrys will also be taking the opportunity to disconnect.

The journal club calendar was added to TRiM's website.

Denise will talk to everyone May 12-13, 2022, and send out updated EAC agenda after this meeting.

VI. Adjourn – The meeting adjourned at 1:05 p.m.

REPORT OF THE EXTERNAL ADVISORY COMMITTEE

1P20GM130443 “Mammalian Hibernation Research- A Path Towards a Center for Transformative Research in Metabolism” – Kelly Drew, Ph.D., Principal Investigator
June, 2022

On May 12-13, 2022, the External Advisory Committee (EAC) met to evaluate progress toward the goals of this COBRE grant. EAC members were impressed with the science and overall quality of the presentations. Strengths of the program evident during this virtual meeting included a very strong mentorship capacity (mentor/mentee ratio: 2:1) which resulted in successful pilot studies and multiple grant submissions, as well as exciting new research directions including the potential to grow metabolomics in the AIMS Core (at UAA) through the Orbitrap mass spectrometry system.

The EAC makes the following recommendations to the TRiM PI and UAF Administration:

- While faculty presentations were on a high level scientifically, there is room for improvement of the presentation style. Investigators would benefit from practicing their presentations beforehand to obtain critiques, especially for new research directions. Investigators should only present to EAC members as opposed to the whole group to provide more opportunities for honest and constructive feedback. This could be achieved by adding extra time to EAC meetings to allow for more direct conversation between the EAC and investigators.
- Support of TRiM's community engagement efforts by creation of a community engagement committee that will provide an interactive feedback loop for educating and receiving guidance from community members to inform TRiM's research activities. The community engagement committee should be unique to TRiM and should not overlap with existing community engagement efforts at UAF.
- Include proposed Summer School in Environmental Physiology as part of community outreach activities to increase outreach to students/teachers, improve mentorship, and enhance visibility for UAF. UAF is recommended to co-sponsor this activity in partnership with TRiM.
- Increase engagement with WWAMI and health care providers, which can be initiated by offering CME credit for TRiM trainings. This will help to attract clinicians and graduate students. Collaborative efforts should be explored with Providence Alaska Medical Center to grow community engagement.
- Extend outreach to veterinary community by adding a member on the Translational Advisory Committee who is a physician familiar with the canine model in order to maintain focus on improving human health as long-term goal by using animal models, and to identify mechanisms that can be translated. Reach out to NIH Branch Chiefs to ask for their recommendations regarding use of canine trials.
- Support new faculty hires, including support for research faculty. This is important, because UA has lost faculty due to budget cuts and has not hired many new assistant professors as replacement.
- Increase institutional support of the TRiM cores as this is important for the grant renewal and TRiM's long-term success.
- For the TRiM grant renewal application, name Prof. Kristen O'Brien as the new Center Director and appoint Prof. Drew as Deputy Director. Dr. O'Brien is an established scientist who can provide senior leadership to replace the departure of Dr. Robert Coker. Dr. Drew's continued involvement as head of the Administrative Core will provide leadership continuity from TRiM in training its next generation of leaders.

Respectfully submitted:

Detlev Boison, Ph.D., Professor and Vice Chair of Research and Training, Dept. of Neurosurgery, Rutgers, The State University of New Jersey.

Thomas S. Kilduff, Ph.D., Director, Center for Neuroscience, SRI International

David Lathrop, Ph.D., Consulting Scientist and former Chief of the Heart Failure and Arrhythmias Branch, Division of Cardiovascular Sciences, NHLBI/NIH.

Margaret Rice, Ph.D., Professor and Vice Chair for Research, Dept. of Neuroscience and Physiology, NYU Grossman School of Medicine.

**Center for Transformative Research in Metabolism
External Advisory Committee In-Person and Virtual Meeting
August 8-12, 2022**

**9:00 a.m. to 1:30 p.m. (August 8); 1:00 to 1:45 p.m. (August 11); & 1:00 to 4:30 p.m. (August 12)
Draft EAC Meeting Agenda**

Meeting Objectives:

1. Research Project Leaders and Pilot Project Investigators receive valued guidance from EAC members through one-on-one meetings. Investigators prepared to provide information regarding project updates and plans for moving forward to EAC members.
2. UAF and UAA Tours of Core Facilities and RPL labs
3. EAC meetings with UA administrators
4. Discuss plans for moving forward with applications to SuRE First (Sept 27, 2022), NSF (January 15, 2023), NIA PO1 (Jan 25, 2023), SuRE (May 26, 2023) & the COBRE renewal (May 30, 2023).

Meeting Desired Output:

1. Professional development for TRiM's RPLs and Pilot Investigators based on EAC and mentor guidance.
2. UAF & UAA administrator support for the COBRE renewal application.
2. EAC response to draft Core facility narratives for the Center's funding applications. (Draft core narratives included in the EAC meeting packet).

Monday, August 8: Meet at the Akasofu Building, Upper West Ridge campus, at 2160 Koyukuk Drive, Room 401

9:00 a.m. *Welcome and overview of the EAC August meeting goals and activities.*
Dr. Kelly Drew, Director, Center for TRiM

9:15 a.m. *Summer School in Environmental Physiology of Hibernation*
Dr. Brian Barnes, Director, AK INBRE

10:00 a.m. *Break*

10:15 a.m. *Research Project Pitch, COBRE Renewal Application (30 minutes /pitch)*

- Oivind Toien, PhD, *Adaptations of Sleep and Cardiac Rhythms in the Hypometabolic State of a Human Sized Hibernator*
- Anya Goropashnaya, PhD, *Molecular changes in a hibernator's skeletal muscles during winter as a pathway to peripheral artery disease intervention.*
- Kriya Dunlap, PhD, *Vitamin D and Healthy Aging: Establishing the Sled Dog Sentinel for the Circumpolar North*
- Jack Chen, PhD, *Blood Transcriptomic Changes in Hibernating Arctic ground squirrel - Metabolic Biomarkers Associated with Hibernation*
- Mario Muscarella, PhD, *TBD project title*

12:45 p.m. *Lunch Break - Catered Lunch*

1:00 p.m. Overview of the ASET Lab & Metabolomics – Dr. Patrick Tomco, UAA (virtual presentation)

1:45 p.m. EAC Meeting with UAF Administrators. (Requested Chancellor's conference room for this meeting.)

- Chancellor Dan White (invited but unable to attend)
- Nettie La Belle-Hamer, PhD, Vice Chancellor for Research
- Diane O'Brien, PhD, Interim Director, Institute of Arctic Biology
- Karsten Hueffer, PhD, Interim Dean, College of Natural Science and Mathematics
- Anumpa Prakash, PhD, Provost and Executive Vice Chancellor (invited)
- Kristin O'Brien, PhD, Professor of Biology and Wildlife (invited)

3:15 p.m. UAF Tours of Research Labs & Facilities

- HaMR Core, Lower Level Murie, led by Carl Murphy, PhD, Core Leader
- Research Labs: Fedorov Project 1 and Goropashnaya Pilot Project, West Ridge Research Building (WRRB) 2nd floor labs, and Drew lab, Murie Building, 2nd floor

4:30 p.m. Dr. Fedorov meets with EAC - *State of the Lab Address*

Recess to Thursday, August 12, 2022, Meet on the UAA Campus

6:00 p.m. No Host Dinner – Meet at Chena Alaskan Grill outdoor deck, River's Edge Resort, 4200 Boat Street or The Greens Bar & Grill, 1735 Farmers Loop Rd.

Tuesday, August 9, 2022 – Train Ride, Hike and Dinner in Denali Park

7:15 a.m. Meet at Alaska Railroad Fairbanks Train Depot, 1031 Alaska Railroad Depot Road. UAF TRiM staff will provide transportation for those staying in hotel. Check-in at 7:20 a.m. Train leaves @ 8:20 a.m. and arrives in Denali Park at 12:10 p.m.

- Time for relaxed and informal discussions of EAC members with TRiM personnel. Focus on professional development for Junior Investigators and grantsmanship strategies for TRiM's continued funding. Dinner at 229 Parks.

Wednesday, August 10, 2022 – Train Ride from Denali Park to Anchorage

8:00 a.m. Continental breakfast will be served at Denali Grizzley Lodge from 8:00 to 8:45 a.m. Transportation will be provided by UAF TRiM personnel from the Lodge to Denali train station at 11:15 a.m. Train leaves @ 12:30 p.m. from Denali Train Depot and arrives in Anchorage @ 8:00 p.m.

- Continue informal discussions regarding Professional Development of Junior Investigators and grantsmanship strategies for TRiM's continued funding.
- Check-in at hotel (TBD) and no host dinner.

Thursday, August 11, 2022 – UAA Campus. Meet at ConocoPhillips Integrated Science Building (CPSB) 105A meeting room (requested)

9:00 a.m. *Welcome to UAA: The UA Center for TRiM Partnership, A Focus on UAA Resources and General Orientation*

Khrys Duddleston, PhD, Professor and Director, Department of Biological Sciences.
PI, *Microbial provision of essential amino acids: Protein conservation in hibernation, Project 2* and Chair of the Internal Steering Committee
Breakfast snacks and coffee will be provided.

9:15 a.m. *UAA CPSB Tour of TRiM Research Labs & Facilities*

- Advanced Instrumentation in Microbiome Studies Core (AIMS), 3rd floor
Brandon Briggs, PhD, Core Leader, Eric Henderson, B.S. Lab Manager, and Kirstin Grond, PhD, Bioinformatician
- Briggs Lab Tour, AIMS Core Leader, 3rd floor
- Duddleston Lab Tour, Project 2, 3rd floor
- ASET and Metabolomics Lab, Dr. Zac Redman, 3rd floor
- Physiology and Cell/Molecular Research Wings, 2nd floor
- Animal Vivarium, 1st Floor

11:00 a.m. Break

11:30 p.m. Lunch Break on campus

1:00 p.m. Overview of AGS Breeding Program - Chris Terzi, UAF Animal Resource Center (virtual)

1:45 p.m. Dr. Duddleston meets with EAC - *State of the Lab Address*

3:00 p.m. Exit EAC meetings with UAA Administrators – Chancellor’s Conference Room, ADM 204

- EAC members to meet with Provost Denise Runge, VCR Aaron Dotson, and Dean Jenny McNulty. Khrys Duddleston, PhD, Brandon Briggs, PhD, AIMS Core Leader, Kelly Drew, PhD, and Denise Daniello are invited to attend, representing TRiM.

4:30 p.m. EAC meeting wrap-up, set upcoming meeting dates, and concluding remarks

Recess to Friday, August 12, Optional

7:00 p.m. No host dinner at TBD location.

Friday, August 12, 2022 – For those who are available

1:00 p.m. *Mock Study Section of Research Project Applications* submitted August 1st in response to call for Project Proposals and other applications with a September deadline.