

# UA Center for Transformative Research in Metabolism Translational Advisory Committee, Draft Agenda Tuesday, November 1, 2022

# Join Zoom Meeting

<u>Updated</u> Meeting Date/Time: Tuesday, November 1, 2022 at 2:00-2:30 p.m. ADT; 3:00-3:30 p.m. PDT; and 5:00-5:30 p.m., CDT. If you are unable to make the meeting or have questions, please email Denise at: <u>dldaniello@alaska.edu</u> or Kelly at: <u>kdrew@alaska.edu</u>. The meeting packet includes the agenda, notes from last meeting (1.17.2022), and description of the TAC's role from TRiM's COBRE P1 application.

TAC Meeting Objectives: (1) Introduce TAC members, with a focus on our newest members; (2) Provide updates regarding TRiM's new intervention platform and the COBRE renewal; and (3) Schedule date/time for next meeting.

Participants	Attend	Invitees	Attend
Nicolaas Deutz			
Katherine Tuttle			
Stacy Rasmus			
Daniel Promislow			
Judith Kelleher			
Kelly Drew			
Denise Daniello			

Time (ADT)	Торіс	Lead
2:00 p.m.	• Brief introductions by all, as we have new members and expertise.	Kelly and All
2:05 p.m.	<ul> <li>Discuss TAC purpose. (Please see TAC description from the COBRE P1, p. 4)</li> <li>Update members on the COBRE renewal.</li> </ul>	Kelly
2:15 p.m.	• Discussion: Use of the canine model as an intervention platform. Hibernation will remain our discovery platform in the renewal.	Kelly and All
2:20 p.m.	Discussion	All
2:25 p.m.	<ul> <li>Schedule next meeting - Proposed topics         <ul> <li>Preparing for the renewal and the role of the TAC. What changes do we need to make?</li> <li>Members to appoint new TAC Chair</li> <li>TAC member updates</li> <li>Other topics</li> <li>Schedule date/time for next meeting</li> </ul> </li> </ul>	All
2:30 p.m.	Adjourn	All

TRiM Translational Advisory Committee Meeting Notes

#### January 17, 2022, 10:30 to 11:30 AST

Members Present: Robert Coker, PhD, TAC Chair; Kelly Drew, PhD; Nicholas Deutz, PhD, MD; Katherine Tuttle, MD, FASN, FACP, NKH, and Denise Daniello, MA (ex officio)

<u>Meeting Purpose</u>: Discuss a path to move forward for TRiM's translational research with the departure of PI Coker and Project 3, research on the effects of an experimental meal replacement involving a human clinical trial.

## Discussion

*Transitions.* Dr. Robert Coker ("Trey") shared news of his leaving UAF to take a new position at the University of Montana as the Deputy Director for the Work Physiology to Exercise Metabolism program. He also shared his perspectives of how his departure may impact TRiM's translational research and use of human clinical trials. He noted that UA needs more resources devoted to building infrastructure to support translational research. Trey also added that the lack of infrastructure, stemming from budget constraints, limits our growth in clinical trial research and ability to recruit/retain a critical mass of investigators in-house who are needed to conduct translational research at UAF.

Introducing the Canine Model for Translational Research. Kelly described the canine model as TRiM's new intervention platform to conduct translational research studies. This platform will be used to develop a model for brain aging using the canine cognitive dysfunction model. With the veterinary medicine program and focus on One Health at UAF, Kelly said that the canine model opens a translational research opportunity for TRiM and clinical trials. This model is currently used by Dr. Kriya Dunlap for her pilot project examining the nutritional benefits of Vitamin D in wild salmon for dogs that may have human application. The canine model is very relevant to humans, Kelly explained, because dogs have a shorter life span and share similar risks for cognitive dysfunction with humans. The canine model is on a faster trajectory that will allow us to assess the efficacy of novel treatments and get faster results at a significantly lower cost. Dr. Dunlap's mentor is Daniel Promislow, co-Director of the Dog Aging Project at the University of Washington, who has extensive knowledge in the canine model for translational research. UAF also has veterinarians on staff and veterinary diagnostic imaging available using our MRI that would support studies employing the canine intervention platform.

Dr. Deutz recommended that TRiM continue to focus on human subjects work as our long-term goal. We could consider expanding TRiM's focus on metabolism to include behavioral health and collaborate with Dr. Stacy Rasmus on her behavioral health clinical studies. Rather than dropping human subjects research, Dr. Deutz contended we should figure out where we are and how to build on what we have in place to move forward.

Prioritizing: Hiring a new faculty member who has relevant clinical research expertise will benefit One Health, TRiM, and UA. Trey observed two problems with conducting translational research or clinical research at UAF: (1) Lack of infrastructure and (2) lack of connectivity to others in the field, especially on campus. Trey noted that most of his connections are with researchers off campus.

Kelly discussed the merits of following the One Health paradigm for TRiM's translational research. One Health, Kelly explained, is a broad field that includes any research that connects animal and human health. The Chancellor has contributed significant resources to this new focus which will grow our expertise in animal health and "somehow" relate it to human health. The field has broad research applications. One Health now offers a new master's program.

Dr. Katherine Tuttle agreed that aligning TRiM's research with institutional priorities would help to build support from the administration however, she noted her lack of expertise in canine medicine. Dr. Tuttle recommended including someone on the TAC with expertise in dog research to advise TRiM in this new direction. One potential area of research focus, well-funded by NIH, is to examine the effects of long Covid on dogs, as dogs are also vulnerable to Covid. Dr. Tuttle suggested that the UAF Vet School could do a small study where all dogs are screened for Covid that come to the clinic. This study could be done as part of TRiM's canine aging project to determine the effects of Covid on dog brain function, provided there are significant numbers of dogs in Alaska with Covid to support the research.

With the emphasis on One Health having a connection to human health, Dr. Deutz pointed out that employing a clinician active in conducting human research is important to support the human aspect of the One Health focus to make it "real." Advocate to the Chancellor and perhaps the Legislature for a new faculty member who is trained in both clinical research and physiology to support growth in the One Health program and fill academic holes. With Trey's departure and the pending retirement of Dr. Tom Green, there is only one faculty member left in the department to teach classes in physiology.

Kelly asked Trey to stay on as an advisor to TAC or with the President Professors Program, as this was his last meeting with TRiM. Trey said that he would give it consideration.

## Next Steps

- Advocate to hire a new faculty member who has a clinical research background and training in physiology to grow TRiM's translational research, support a human translational research connection with One Health, and enhance UAF's academic and research infrastructure. Engaging a MD with clinical expertise is most desirable but challenging due to the small pool of MDs, limited clinician time due to patient overload, and budget constraints. Candidates with a PhD and clinical research experience are viable options.
- Clearly define research goals. These goals will guide who to recruit and the type of research studies to be conducted. If the study requires blood draws, for example, hire a nurse for a few hours to do this work, instead of a MD.
- Recruit new TAC member(s) who are knowledgeable and have relevant expertise in translational canine research to advise TRiM. Maintain our focus on human health and clinical trials through existing TAC members.
- Aim to grow the "critical mass of investigators" at UAF in clinical research with an observational focus and understanding of physiology.
- Engage the community to guide the research. How will our research goals impact community health? Rural Alaska has critical behavioral health problems including depression, suicide, and alcoholism. Use mechanisms and interventions that are culturally relevant to address these problems. For example, how can subsistence and traditional foods be used to inform "nutritive interventions" that promote physiological and mental health? This is strong human research that addresses pressing community problems.
- Explore potential research connections between TRiM and the Center for Alaska Native Health Research, building on CANHR's infrastructure and reputation.
- Find a Champion in the community to help us advocate to policymakers and UA leadership for resources to move TRiM forward and support translational clinical trial research at UAF.

Meeting was adjourned at 11:30 a.m. (ADT)

### Translational Advisory Committee Description from COBRE P1 Proposal (p. 253)

**Translational Advisory Committee:** Dr. Coker will chair the TAC comprised of strategic partners with knowledge, experience, and commitment to develop translational research in Alaska. Committee members include:

1) Robert Coker, PhD (Chair); 2) Stacy Rasmus, PhD, Interim Director of the Center for Alaska Native Health Research, UAF; 3) Katherine Tuttle, MD, Co-Director of the Institute of Translational Health Sciences (ITHS) Regional Collaborations Program and Medical & Scientific Director at Providence Medical Research Center in Spokane, Washington; 4) Nicolaas Deutz, MD, PhD, Director of Translational Research in Aging and Longevity, Texas A&M University; 5) Kelly Drew (PI); and 6) exofficio committee member Denise Daniello (PC).

A.5.3. Leadership Succession Plan. In the unanticipated event that Dr. Drew is not able to lead the P1C or continue as director of the Center established during the award period, Dr. Coker will serve both as interim PI and as Acting Director until a permanent PI and Center Director is identified. The process for selecting a permanent replacement will begin with a recommendation from the EAC to Dr. Brian Barnes (Director, Institute of Arctic Biology, UAF, the organizational home for the Center) and Dr. Larry Hinzman (Vice Chancellor for Research, UAF), as to whether a search committee should be formed to identify a permanent replacement. It is possible that the EAC will advise that the Center Director and PI for the P1C be different individuals. If UAF officials make this recommendation, two searches will occur. In either case, before appointing a permanent PI for the P1C, formal approval for the nominee will be sought from NIH program staff. If obtained, UAF will formalize the appointment. We anticipate that Dr. Coker will attain independent-investigator status during the P1C and serve as PI or co-PI of the P2C. The P1C focuses on building and supporting existing strengths in hibernation and metabolism research. The P2C will focus on expanding Alaska's capacity for clinical research. Dr. Coker currently leads growth of clinical research capacity at UAF. He will continue his efforts to grow translational capacity during the P1C and during the P2C when expansion of clinical research capacity becomes a primary focus of the Center. Expanding translational research networks will significantly and positively impact the feasibility of Dr. Coker's research by identifying clinicians with subject matter specific expertise and availability to serve as study physicians. Clinical and translational partners will create an environment that inspires and makes feasible, translational paths for hibernation research.