

Murray State University | Office of Research and Creative Activity
ORCA Travel Grants Information 2023-24

Last updated 6/29/2023

ORCA has a modest amount of funds available to assist students in support of travel to present, perform, or exhibit their faculty-mentored research or creative activity at off-campus professional conferences or gatherings. Travel awards provide a maximum total of \$800 per individual student per academic year. Award money is distributed via interdepartmental reimbursements to your campus departments.

A copy of documentation (letter/email/website screenshot) that confirms acceptance of the presentation, performance, or exhibition must be included with your proposal.

An on-campus presentation or publication related to the work is expected (ex. a [Scholars Week](#) presentation; interview discussion in [Steeplechase: An ORCA Student Journal](#); or deposit of a copy of a related paper, poster, presentation, or white paper to [Murray State's Digital Commons](#)).

Please do not hesitate to contact AJ Boston at msu.orca@murraystate.edu or aboston@murraystate.edu should you have any questions regarding the program or application process.

A new round of grants will open the first week of Fall 2023 classes.

Please wait until August 1st, 2023 to download this document; it will undergo changes during summer.

Instructions & Information

For Students:

- Download a copy of this application
 - At the top of this Google Docs page, click **File**, select **Download as**, and select **Microsoft Word**
- Save your file as “ORCATravel_[yourfirst.yourlastname]”
 - ex. “ORCATravel_RobertJackson.docx”
- Fill out the application as instructed
 - Complete Sections A-E
 - Part F is to be completed by your Faculty Mentor
- Submit basic information at Murray State’s Digital Commons
 - Go to: <http://digitalcommons.murraystate.edu/orcagrants/>
 - Click ‘Submit’ in the Author Corner on the left-hand
 - *Create a new account, if you have not used the site before*
 - Complete the registration form
 - *Include a public-facing summary*
 - *View successful past grants at this site*
 - *You do not need to upload any documents*
 - You will receive an immediate automated email from Digital Commons, notifying that your application has been submitted

For Faculty Mentors:

- After you receive this document, review Sections A-E completed by the student
- Complete Section F
- Email the completed document to AJ Boston at aboston@murraystate.edu with the subject line “ORCA Travel Grant: [Student_Lastname]”

For Students and Faculty Mentors:

- Travel Support Grants will be reviewed after the Student has submitted basic information through Digital Commons and the Faculty Mentor has emailed the completed application
- Within 5-10 business days of review, the Student and Faculty Mentor should expect an email from the ORCA Coordinator containing a decision and instructions for next steps

ORCA Travel Support Grant Proposal Document - 2023-24

A.) Student Name & University M#

Full Name: Megan Elizabeth Zerger

M#: 00204066

B.) Project Information

Title: Assessing the interaction of stress physiology and *Bd* infection in Arizona tiger salamanders (*Ambystoma mavortium nebulosum*)

Format (e.g. poster, paper, roundtable, performance): Poster

Abstract/Description:

Amphibian biodiversity has greatly diminished in recent years due to panzootic pathogenic fungi *Batrachochytrium dendrobatidis* (*Bd*), the cause of the deadly disease chytridiomycosis (chytrid). The pathogenesis of chytrid is still unclear, as certain species and individuals within a species are differentially affected. Susceptibility and mortality of *Bd* are influenced by prolonged corticosterone activity, which deleteriously affects many of the same physiological processes as *Bd* infections. Thus, the objective of our study is to assess the relationship of corticosterone variation and *Bd* spore load in Arizona tiger salamanders (ATS; *Ambystoma mavortium nebulosum*) of Gunnison County, Colorado. In 2022 and 2023, we used a dermal swabbing method to collect baseline (resting) corticosterone from paedomorph (aquatic morph) and metamorph (terrestrial morph) ATS within three minutes of capture. *Bd* samples were then collected via skin swabbing. These samples will allow us to consider corticosterone and *Bd* spore load variation by morph, sex, location, and body condition. This study will provide a greater understanding of the pathogenesis of *Bd* and the interacting effects of glucocorticoid production and polyphenic life history on disease resistance. These results will develop the use of corticosterone as a predictor of *Bd* susceptibility and severity.

Conference Name (full, no abbreviations): The Tennessee Herpetological Society annual meeting

Dates: September 28th and 29th, 2023

Sponsoring Body: Tennessee Herpetological Society

Conference Website: <https://www.tnherpsociety.org/meeting>

Conference Name (full, no abbreviations): The Wildlife Society's 30th Annual Conference

Dates: November 5 - 9, 2023

Sponsoring Body: The Wildlife Society

Conference Website: <https://twsconference.org/>

C.) Acceptance notice (Paste a screenshot of your conference acceptance email or online program)

TWS2023 - SRIP Abstract Status Update External Inbox x

TWS2023 - Program Committee <noreply@xcdsystem.com>
to me ▾

Mon, Jun 26, 9:54 AM ☆



Dear Megan Zerger :

We are pleased to inform you that your abstract has been accepted for inclusion in TWS2023. We are excited that you will be joining us for the conference in Louisville, Kentucky from November 5 - 9, 2023.

The details of your presentation are below:

Presentation Title: Assessing the Interaction of Stress Physiology and Chytrid Infection in Arizona Tiger Salamanders (ID:124)*

Session: Contributed and Student Research in Progress Posters

Session type: Posters

Presentation Time (in-person presentations only): Tuesday, November 07, 2023 from 5:00 PM - 7:00 PM*

D.) Detailed Amount Requested

Total amount requested: \$800

Other potential or secured funding sources: I have requested funds from Murray State JCSET, as well as the Chadwick Lewis Memorial Grant for the TN Herp society meeting, and 2023 Wayne Sandfort Student Travel Grant for the TWS meeting. If ORCA funds do not cover all my travel expenses, I am sure I can acquire additional funding from external sources (such as the Watershed Studies Institute).

Total overall estimated costs:

TN Herp Society: Airfare: \$0

Mileage: 96 miles to Union City and back to Murray, 50 cents/mile, \$48

Lodging: Holiday Inn Express & Suites Union City, \$150/night

Meals (\$7 breakfast, \$8 lunch, and \$15 dinner): \$80

Conference/Gathering registration: \$15

Other:

Total: \$293

The Wildlife Society: Airfare: \$0

Mileage: 454 miles to Louisville and back to Murray, 50 cents/mile, \$227

Lodging: The Galt House Hotel, \$224

Meals (\$7 breakfast, \$8 lunch, and \$15 dinner): \$160

Conference/Gathering registration:

Other:
Total: \$611

E.) Local Presentation - Funded students are expected to share their expertise with campus. Use an X to indicate at least one of the following options.

Live Presentation Options:

[Fall Scholars Week](#) (November 13-17, 2023)

[Spring Scholars Week](#) (April 15-19, 2024)

[Posters-at-the-Capitol](#) (March 7, 2024)

ORCA Journal *Steeplechase* Options:

[Write a ~2,500 word research “snapshot”](#)

[Record an interview](#)

Deposit a [poster](#) or [presentation recording](#)

When Sections A-E are complete, send this document to your Faculty Mentor.

F.) FACULTY MENTOR RECOMMENDATION

Faculty Member Name: Howard Whiteman

Faculty Member Email: hwhiteman@murraystate.edu

Academic College/Department:

Contact Name for Interdepartmental Reimbursement:

Contact Email for Interdepartmental Reimbursement:

i. Describe your involvement in the project:

Megan is the primary on this work, but I have helped her with the design and implementation of her research and will continue to guide her until she is finished. Megan has and will continue to be first author of all presentations and papers that come from this project.

ii. In Section G, the student should have indicated how they intend to share knowledge back with the campus community. Describe your ability to support the student in the venue indicated.

Yes, Megan has presented her research each Scholar’s Week and will continue to do so.

iii. Describe any other ORCA-funded research occurring this academic year that you are involved with, including student names.

Good question. I am not sure if Melissa Ocampo has current ORCA funding, but I am pretty sure her research was funded in 2022.

Faculty, after filling out Section F, please email this document to aboston@murraystate.edu with the subject line “ORCA Travel Grant: [Student_Lastname]”