**STEM TRAIL Center Programming and Resources**

**During Remote Teaching and Research, 2020:**

We continue to offer several core programming options using a Zoom-only option, rather than in-person or Zoom. Additionally, we are here to provide additional support mechanisms to complement those of the University, Colleges, and Units.

**Research:** We aim to complement the existing support mechanisms in place by the University for [faculty support](https://www.unomaha.edu/faculty-senate/faculty-committees/academic-freedom-and-tenure.php) during these [unusual circumstances](https://www.unomaha.edu/news/coronavirus/index.php). Specifically, we aim to offer additional support for researchers who aim to retain research programs during the remote research and social distancing time (e.g. researchers actively involved in clinical trials, those maintaining active colonies, etc). We understand that the potential impact on any academic’s career with a hiatus or slow-down in their typical research program can be significant, so we aim to identify existing needs and help to identify resources to help faculty and researchers remain competitive on a national stage for grants and to publish their work in high profile venues. Consequently, we have collated resources that we are able to provide in an effort to support faculty, graduate student researchers, and undergraduate researchers during the current pandemic.

Specifically, we aim to provide tangible support with things like *research design* and data collection (e.g. assistance with big data, or computationally based projects, **meta-analyses, and systemic reviews**), as well as **grant writing assistance** (including identifying pertinent **RFPs** and other opportunities), and **connecting researchers and scholars with those interested in partnering and enhancing their research program.**

Over the past two weeks, we’ve completed many advising calls particularly for scientists who traditionally work at the wet-bench and who are now in a holding pattern due to social distancing. We, alongside the [UNO Library](https://www.unomaha.edu/criss-library/continuity/index.php), are available to help you to kick off a meta-analysis, computationally based approach, editorial response, or other types of pieces that you’re working on that still complements your wet-bench work, if that has been impacted by the pandemic. Schedule a time to meet with us, or join an [existing call.](https://tockify.com/stem.trail.center/detail/22/1585933200000)

**Graduate Student-Specific Support:** We also recognize that the coronavirus pandemic places much uncertainty on graduate student researchers, particularly those in their final stages. Consequently, we’re organizing a weekly huddle for graduate students to connect them to one another and foster a community of practice. Core themes will be identifying smaller working groups to help in reviewing one another’s work, despite social distancing. Additionally, peer-structures to help students get real-time help with things like figure preparation, public dissemination of their work, etc while their PIs work to move their courses remotely. And, as a reminder, students can get live feedback on their grant proposals during the Grant Writing Workshops (4th Fridays of the month).

**Teaching:** The UNO Information Technology Services Digital Learning group is the best resource for the transition from in-person to remote teaching as they continue to encourage us all with the “[Keep Teaching](https://www.unomaha.edu/academic-affairs/digital-learning/how-we-help/keep-teaching-digital-learning-incident-planning.php)” Mantra. They provide timely updates, How-To’s to set up key software, and can help with troubleshooting on technology. And, check out the [Keep Teaching Together Series](https://www.unomaha.edu/news/events/2020/03/keep-teaching-together-series.php).

We are able to assist with *content-specific questions* for the movement of STEM courses from in-person to online. We have a team of faculty that have previously taught STEM Courses (including labs) online. If you would like additional ideas for how to move certain core concepts, scientific practices, or cross-cutting concepts online, join our [existing calls](https://www.unomaha.edu/academic-affairs/stem-trail-center/rsvps/index.php), and/or peruse the video “[*How to take your STEM lecture course online with minimal disruption*](https://unomaha.zoom.us/rec/play/6ZYqcOqrqDM3T4Kc5ASDAPErW9XoLfqs2yYW8_QOy%20BuxBXIFZ1T0ZecbZOA5UJPAaswv_ldCuy58KpNn?autoplay=true&continueMode=true&startTime=1584119517000).”

Finally, perhaps you’ve already dug into the many resources and are instead grappling with how to **focus your teaching to core concepts** to ensure understanding while maintaining rigor. Peruse the existing Concept Inventories (e.g. [Biology](http://bioliteracy.colorado.edu/conceptlists/index.html), [Chemistry](https://www.chemedx.org/JCEDLib/QBank/collection/CQandChP/CQs/ConceptsInventory/Concepts_Inventory.html), [Geosciences,](https://serc.carleton.edu/resources/20508.html) [Mathematics,](http://dbserc.pitt.edu/Assessment/Assessments-Mathematics) [Physics](http://modeling.asu.edu/R%26E/Research.html) *Force included for simplicity; links to others* [*here*](https://journals.aps.org/prper/abstract/10.1103/PhysRevPhysEducRes.14.010123)) based on best practices from the [National Research Council, as an example](https://academic.oup.com/bioscience/article/58/11/1079/265001). And, with all things, please be mindful of Accessibility. If more resources for Accessibility options across LMS, see these [Considerations](https://unomaha.instructure.com/courses/33506/pages/accessibility-considerations).

**Morale:** The challenge of working remotely is significant! We would love to support you and your work during this unprecedented time, and celebrate your successes with you! Join us in a [Camaraderie Call](https://www.unomaha.edu/academic-affairs/stem-trail-center/rsvps/index.php) (recurring, multiple times/week) while we work remotely. Or send us a major milestone or success and we’ll include it in our social media highlights!

By RSVP’ing to a recurring call series on our calendar, we’ll send a calendar invite to your Outlook calendar with all Zoom details and reminders.

**For Parents:** With the challenge of providing ongoing support for children at home during the remote learning time, we’ve made our hands-on, STEM-based activities publicly available. These are ready to go activities that utilize common household items to help youth to embrace being a scientist and explore the world around them. These activities are designed for K-8 youth and span the STEM disciplines. Follow us on social media to see links to other resources for STEM learning around the world.

At this time, our April retreat and workshops scheduled for April 1-3, focused on *Growth Mindset, A workshop on Delivering Workshops, and Practice to Publishing,* are all post-poned for Fall 2020. Join us for the final presentations of the 2019-2020 STEM TRAIL Center Programming series in April: [DBER seminar series](https://www.unomaha.edu/academic-affairs/stem-trail-center/rsvps/index.php) April 17th and [Grant workshop series](https://www.unomaha.edu/academic-affairs/stem-trail-center/rsvps/index.php) on April 24th via Zoom.

If you have specific offerings that you’d like to see offered by the STC, please email us unostemtrailcenter@unomaha.edu.

Wishing you, your families, and your teams perfect health and wellness,

The STEM TRAIL Center Team