



Newsletter

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As we close out 2020, we take time to reflect upon the year. We've been tremendously fortunate to have had the opportunity to work with so many innovators, brilliant creators, stellar educators, and leaders over this past year. At the STEM TRAIL Center, we offer programming twice every week, and we have expanded some of our series this past year in an effort to add to the diversity of offerings for the STEM community. We will spend part of this newsletter highlighting in greater detail some of those more salient programs in case you haven't been able to experience them yet but wish to learn more. We welcome you to read more about the workforce development pieces for students via internships and other experiential learning opportunities, and professional development videos on page 3. Or, about the mentor: mentee cohort on page 2; these are cohorts where we match faculty and staff interested in finding a mentor for either research or as an instructional coach with a mentor that's outside of their core area to gain additional perspectives to guide their work and professional development. Finally, if you've missed some of our feature facilitators from the Teaching Practices Workshop Series, we invite you to spend some time viewing the recordings over the winter recess, more about that on page 3.

Finally, we urge you to utilize some of our support mechanisms to help you set and achieve your goals for Y2021. For faculty, this might be gaining advice on how to structure your pursuit of STEM grants, or identifying assessments that can be implemented within your classroom to help you gain formative and summative feedback. For undergraduates, this might be seeking advice on how to apply for internships or how to even find which ones are available locally or internationally. For teachers, we continue to add new content that's accessible to your classroom for hands-on STEM, and for all of our outstanding community members, we will be offering various symposia in the spring to which you'll be welcomed to hear from researchers all over the world in STEM. Trying to piece all of your plans for 2021 together? Check out the Gantt Chart training recap on page 3.

As we close out the year, we want to express our sincere gratitude to you as our partners. Seeing your faces at programming, or reading your notes of inspiration really help to keep us focused on our core mission, which is that we exist to elevate human potential through lifelong learning. Always learning.



Don't miss any events!

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Breaking Silos and Making Connections

[Roni Reiter-Palmon, Ph.D.](#), is an organizational psychologist interested in creativity and teams. She's worked at UNO for over 25 years. Down the hall from her, in another department, is [Kelly MacArthur, Ph.D.](#), a sociologist who studies the ways in which social networks facilitate well-being and prevent burnout among medical professionals. They had never met one another, but together their expertise is paving the way for an innovative partnership and a new NSF proposal.



Drs. MacArthur and Reiter-Palmon were introduced to each other via the STEM TRAIL Center, and they are part of the inaugural cohort of the [STC's Research Mentor Cohorts](#). The Research Mentor program is designed to match those interested in taking their research to the next level by matching them with a mentor in or outside of the university, but always outside of their traditional disciplinary silo. "The STC is all about busting down silos," says Christine Cutucache, Director of STC. She adds, "interdisciplinary research, teaching, and inclusion will help to best prepare the next generation of students, so we're actively working to support these mutually beneficial partnerships."


Reiter-Palmon and MacArthur initially met through an STC event and afterwards, MacArthur reached out to Reiter-Palmon with a question about a grant. From there, the STC helped create a formal mentor/mentee relationship, which MacArthur says helps her feel freer to ask Reiter-Palmon questions and for advice. "It's nice having a point person to ask questions and make a mentoring plan with."

Both professors find value in the STC and the resources it offers. "There's a slew of information related to grants, such as the formulaic information, and in terms of how helpful that is to faculty that don't yet have those, that's a terrific starting point," says Reiter-Palmon. She also enjoyed the camaraderie hours that took place in the summer, stating the need for a group of people that could just drop in and talk.

When it comes to interdisciplinary research, MacArthur says, "there's no other way." Reiter-Palmon agrees, adding, "I learn more, I take into account viewpoints that I didn't before and it challenges me, and after doing this job for so many years, it's my peers challenging me on interdisciplinary teams."

While there are many positives to interdisciplinary research, there are also some obstacles to overcome. "We each have our own technical language, and we use the same words sometimes for very different things," says Reiter-Palmon.

Ultimately, they both agree, the STC is great at making connections. Reiter-Palmon says, "Connections to me are the big thing—we kind of stay in our own departments, and then we don't know other people. We can be in the same building, on the same floor, for years, and don't know one another until the STC and helping to form those connections more organically."



Add these to your holiday watch list.

 [Click Here to Watch Now](#)



Alaina G. Levine

10+ Things You Can Do NOW to Get a Job and Move Your Career Forward



Bonni Stachowiak, PhD

When Me Becomes We: Practical Ways to Reach and Engage Students



Mr. Jack Parkinson

The Relationship Between Spatial Skills and Computing Science



Heather Leas

Visualizing Project Timelines with Gantt Charts



Dr. Deepak Khazanchi

Strategies for Effective E-learning: Theoretical Foundations and Best Practices



Dr. Tracie Reding

From Meta to Micro: The Breadth of Social Network Analysis and its Potential Impact in Grants

TRPP Virtual Poster Symposium

Wednesday, December 9, 4-6pm

Join us on Wednesday to see and hear the great work of the Teacher Research Partnership Program (TRPP). The TRPP 2020 cohort consists of 13 partnerships with teachers from 9 different schools and faculty mentored projects in 6 different UNO STEM departments. RSVP on the STEM TRAIL website.

Upcoming Events



Summarizing Data with Excel PivotTables, PivotCharts, and Dashboards - an Introduction

Facilitator:

Heather Leas, Grant Coordinator for STEM Education Grants,
UNO STEM TRAIL Center

We welcome all, (but especially undergraduate and graduate students) to the Wednesday Programming Series. The STEM TRAIL Center supports undergraduate and graduate student professional development, including areas of career preparation, networking, and a journal club focused on equity in STEM.

Wed, January 27th 10:00am - 11:00am

RSVP information to be announced

Does My Research Require IRB Review?

Facilitator:

Brenda Kolobara, Research Compliance Officer,
Office of Research and Creative Activity

We will cover what is “human subject research” for IRB purposes, and who needs IRB approval. Tips will be offered for beginning the IRB submissions and questions such as “Does my pilot study need IRB review?” and “Does research on samples from cadavers require IRB review?” will be answered.

Fri, January 29th 11:00am - 12:00pm

RSVP information to be announced



Instructional Coaching & Research Mentoring Cohorts

Facilitator:

Dr. Chris Moore, - Assistant Director of the STEM TRAIL Center, Haddix Community Chair of Physical Science, Professor of Physics - College of Arts & Sciences

Looking for an Instructional Coach or Research Mentor? Join us to find a mentor, earn faculty professional development funds, and take your teaching and research to the next level.

Fri, February 12th 11:00am - 12:00pm

[Click here for more information and to register](#)

Resources from Criss Library

[Attend De-Stress Fest at Criss Library!](#)

Criss Library Hours During Prep and Finals Week

- Mon-Thurs, Dec 7-10: 7am - 11pm
- Friday, Dec 11: 7am - 5pm
- Saturday, Dec 12: 12 - 5pm
- Sunday, Dec 13: 12 - 9pm
- Mon-Wed, Dec 14-16: 7am - 11pm
- Thursday, Dec 17: 7am - 9pm
- Friday, Dec 18: 7am - 5pm



Resources from the Office of Digital Learning

Humanizing Online: One Bite at a Time

Join Digital Learning and faculty experts as we explore literature, pedagogical practices, and tips and tricks that will prepare you to design an engaging online course with plenty of opportunities for engagement and community-building. If you haven't checked out the materials yet, they are a hit so far, according to faculty.

"I am loving the Humanizing course thus far." said Kristy Schweitz, Assistant Director of Advising, College of Business Administration. "I love that I am getting some things accomplished for my course that I hadn't even considered (Canvas photo, profile page, etc.)."

Learn more at online.unomaha.edu/humanizing and take the asynchronous primer, small, medium and large bites any time.

You can also still sign up for the January session: "Continuing the momentum to the end: Course Design in Weeks 3 to End." Starting Jan. 4, this 3-week session will provide \$300 stipend to join a cohort of professionals to maximize momentum through the middle and final weeks of your course. Deadline to reserve a spot is Friday, Dec. 25!

Holiday Break

The Digital Learning Team will be taking a break from the virtual drop-in hours during the holiday shutdown Dec. 24 through Jan. 3 inclusively. We will be available until Dec. 23 and back to help you first thing Jan. 4 from 9 a.m. to 4 p.m. Monday through Friday. Thank you!



Prairie STEM Education and Partnerships During a Pandemic

Alan Wang, Executive Director Prairie STEM (Scott Technology Center Location)

Omaha STEM Ecosystem (OSE) and UNO STEM TRAIL have been instrumental in helping Prairie STEM in all aspects of our work in STEM integration for PreK-12 students to understand their greatest value. From roundtable discussions leading the way for community partners (equity and access in education) to connections with Ecosystem partners forming mentoring opportunities for students



(Union Pacific, Kiewit, Olsson) to direct lines of communication with affiliate organizations when needing industry input (Clarkson College giving students hands-on, enriched learning using real-work technology and equipment in healthcare), the OSE has enabled and enhanced the work of non-profits like Prairie STEM in exponentially impactful ways.

Most recently, in direct response to the remote learning environment due to COVID-19, our partnership with UNO STEM TRAIL, OSE, school districts, and supporting foundations has facilitated the distribution of thousands of STEMkits to area students allowing for continued academic progress outside of school. While this doesn't replace the benefits of in-person learning, the hands-on kits allow students and teachers to continue standards-based synchronous learning while in an asynchronous environment.



We believe a high tide lifts all boats and with OSE and UNO STEM TRAIL leading the way, Nebraska students are positioned to take full advantage of technology and STEM during a time when the rest of the country is still struggling to stay afloat. We're thankful for our partners in education and industry where STEM enrichment and connected learning continues to be a game-changer because of the unique opportunity to collaborate with the University and STEM Ecosystem for the benefit of all students.

<https://prairiestem.org/>

Hybrid or Blended Environment: Engaging and Motivating Learners Wherever Learning is Happening!

The Omaha STEM Ecosystem, in partnership with Project Lead the Way, hosted a virtual presentation, Thursday, December 3rd. Engaging and motivating learners is a challenge many educators face regardless of where the learning takes place. This collaborative session provided tips and tools on how to build excitement for content delivery, and discover meaningful ways to motivate learners to tackle real-world problems. Panelists included; Ryan Higgins, Master Educator at Abraham Lincoln High School in Council Bluffs; Susan Lyons, Master Educator at Pella Middle School, Pella, IA; Missy Jabens, Career and Academy Administrator, Papillion LaVista School District; and Megan Addison, Executive Director, Collective for Youth. They shared ideas on topics ranging from the social/emotional health of students, resources for real-world problem solving and how imposed change with a COVID-19 protocol provided opportunities to innovate in the classroom. [Click here to listen to recorded session.](#)



Resources & Opportunities

STEM Graduate Scholarship

The National Science Foundation Research Traineeship (NRT) at the University of Nebraska-Lincoln is seeking to hire three or four graduate students for the Fall 2021 school year. They will be paid a healthy stipend (\$34,000 a year for up to two years for master's students and \$36,000 a year for up to three years for Ph.D. students). Students can find more information at <https://nrt.unl.edu> and <https://nrt.unl.edu/how-apply>.

Undergraduate Scholarships

New full-ride (\$8,000+) scholarships for qualified students who newly-enroll in IT, STEM, and pre-health programs. Additionally, many scholarships exist across all UNO programs. [Click here for details.](#)

Keep an eye out for new internship opportunities for Summer 2021 in our January and February newsletters- prep your CV/resume in December!

Experiential Learning Right from the Classroom at UNO!

UNO students design and fly near-space experiments to the upper reaches of the atmosphere! Learn more- [Dual Launch Elevates STEM Concepts](#), [Two High-Altitude Balloons](#)



Consider a Gift, Support an Intern at your Company, or Volunteer!

Interested in donating? Please consider contributions to our UNO STEM TRAIL Center Excellence Fund #01149830 at the Nebraska University Foundation:

Checks can be mailed to:

University of Nebraska Foundation
PO Box 3465

Omaha, NE 68103-0465

reference: 01149830 - UNO STEM TRAIL Center Excellence Fund

[Or gifts can be remitted electronically.](#)

Let us know how we can support you:

unostemtrailcenter@unomaha.edu



Follow us on Twitter!
@UNOSTEMTRAIL

Have an idea for future programming? Interested in contributing your time or talents to the STC? Contact us!

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