

Newsletter

September 2021, Volume 3, Issue 2

IN THIS ISSUE:

- Upcoming Events
- The Passing of the Torch:
Growing, Leading, and Looking
Toward the Future
- Catapulting Multiple
Generations into STEM
- Omaha STEM Ecosystem
- Meet the New Quantitative
Reasoning Team
- Resources & Opportunities
- STEM Scramble



Follow us on Twitter!

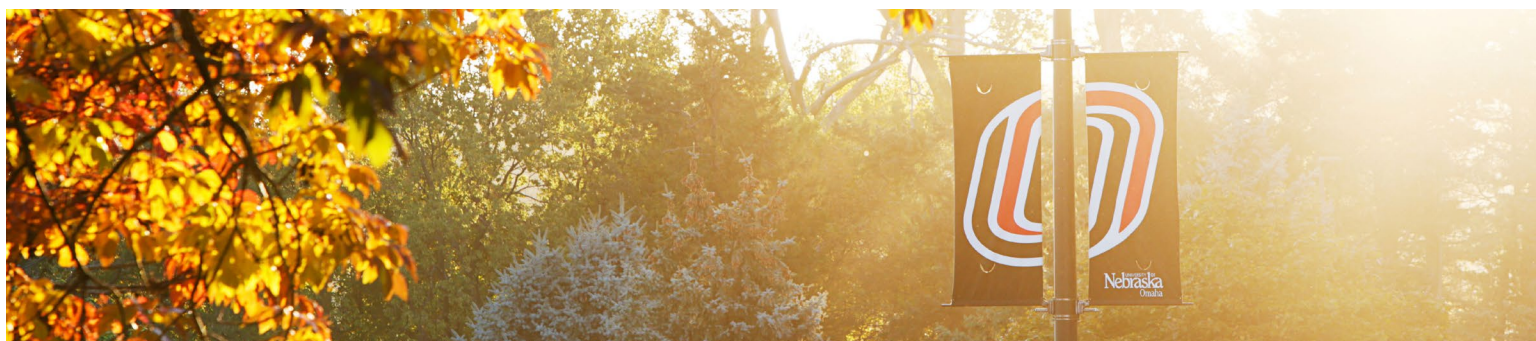
@UNOSTEMTRAIL

The light is on and we are full STEM ahead into the fall semester! We have been thrilled to see both familiar and new faces on campus once again. As you settle into your fall routine, we hope you find some time to enjoy the latest issue of the STEM TRAIL Center Newsletter.

We strive to help people get in touch for genuine partnerships so that there can be fruitful collaborations across campus units. In this latest issue you'll find a highlight of the new Quantitative Reasoning Team, a group eager to visit with you.

There are many exciting STC programming events, so mark your calendars! We are happy to welcome Dr. Stephanie Salomone to campus in early October (Page 2). Dr. Salomone will deliver a workshop on guiding student questions to assist them in framing their own learning, as well as a workshop focused on institutional transformation, "The Making of a T1 Designation."

Please remember, if you have a STEM story to tell, we would love to help elevate it by featuring it in the newsletter or our weekly email. Feel free to submit stories via our website or via unostemtrailcenter@unomaha.edu.



Upcoming Events

Teaching with Dr. Stephanie Salomone

Teaching Practices Workshop Series, *two event special*

Dr. Stephanie Salomone, Professor and Chair, [Department of Mathematics](#);
Director, [STEM Education and Outreach Center](#) at the [University of Portland](#)



Friday, October 1

**In-person and virtual options for both events*

Got Questions?

11:00am - 12:00pm

For instructors of classes

[RSVP Here](#)

How do we support students in asking questions and using those questions to frame their learning, given that we want students to develop skills, knowledge, and dispositions that will allow them to define and achieve success? In this session, we will explore questioning as an act of bravery and persistence, as a way to amplify student voice, and as a way to encourage students to practice divergent thinking, convergent thinking, and metacognition.

The Making of a T1 Designation

2:30pm - 4:00pm

For administrators and changemakers

[RSVP Here](#)

Higher education needs metrics to measure whether an institution meets criteria of teaching excellence, mirroring the Carnegie Classifications for Institutions of Higher Education (R1, R2, M1, M2, etc.) that measure research activity. In this interactive session, I argue that an institution claiming to have achieved the highest levels of teaching effectiveness (T1) does not separate research from teaching, but instead views teaching as a scholarly act, and signals this value through its reward structure; T1 universities have mechanisms for objective metrics to determine effective teaching and learning, including inventories, observation protocols, and faculty self-reflections and demonstration of growth mindset.



University of Nebraska: Center for Biomedical Informatics Research and Innovation (CBIRI)

Friday, Sept. 24 | 11:00am - 12:00pm | [RSVP Here](#)

Virtual Event | STEM Grants Writing Workshop Series

Facilitators: *Dr. Ann Fruling and Dr. Babu Guda*

This presentation will provide an overview of CBIRI and facilitate an open forum on opportunities for faculty, students and community partners to connect with CBIRI's biomedical informatics resources and expertise and collaborate with CBIRI researchers.



The Passing of the Torch: Growing, Leading, and Looking Toward the Future

Omaha native Javier Rodriguez-Flores found himself with a unique opportunity this year, charged with leading [NE STEM 4U Summer Programming](#). Javi is a sophomore at the [University of Nebraska Omaha](#), majoring in Bioinformatics. He is also a member of the inaugural cohort of [S-STEM EMPLOYEE Scholars \(NSF #1929154\)](#). Part of his commitment for the program is to mentor in the NE STEM 4U program, and in doing so, he has found a special niche. Javi was identified as an up-and-coming leader for the program, and the summer of 2021 provided him with a unique opportunity to lead.

When first approached with the opportunity, Javi was hesitant. He was not comfortable in unfamiliar spaces. But, when we become comfortable with the uncomfortable, growth can happen and that is exactly what Javi did. As time passed, Javi realized that previously learned skills to develop relationships with his soccer teammates in past years could be used in this new environment. And so, Javi found his leadership style—fun and outgoing, but highlighted by a level of interpersonal communication that included checking in on his fellow mentors and building relationships that made every mentor of the



Photo by Hayley Jurek

NE STEM 4U program feel valued. When a return to in-person programming for the summer of 2021 was announced, Javi's commitment to the mentors was unwavering. He always made sure that they felt supported.

"There was a moment this summer when he found his wings and he really soared. Javi did a phenomenal job navigating all the schedule changes for sites and mentors alike at 10 locations, while also making sure that mentors felt welcome to approach him with their concerns," says Nik Stevenson, Program Coordinator of NE STEM 4U.

"It was a crazy experience. At first there was someone else to lean on [Nik], then I was handling it on my own. I stayed organized, made lists, wrote things down, and was diligent to sort out the schools and the mentors" says Javi. There is no doubt that through this experience, Javi was able to build on his ability to manage several project components at once, while anticipating challenges that could develop.

When asked where he sees himself after college, he was quick to respond, "I hope to be a special agent in the FBI." It turns out that the professional development opportunities, coined 'STEMinars', that are put on by the NE STEM 4U program, influenced his desire. During one of the STEMinars, STEM career options that one would not necessarily consider for a STEM degree were provided, and this option clicked for him!

His one sentence to highlight the summer, "It has been a very different experience, one that has made me realize there is a lot more going on than what you would see at face value, and very eye opening."

Through his leadership, the NE STEM 4U program offered over 3,000 unique experiences in STEM for Summer 2021. Javi's leadership ushered in the official passing of the torch from the old guard to the new. We are thankful for Javi's commitment and are excited to support him in achieving his professional and academic goals.

Catapulting Multiple Generations into STEM

The [NE STEM 4U](#) program entered a new hemisphere of engagement this summer 2021, thanks to a contract from [Beyond School Bells](#), coined “The Solving the Staffing Shortage Project”. The project aimed to help support elementary and middle schools within Omaha with staff to facilitate summer programming in STEM. It was a way to help bridge the gap in learning that resulted from the pandemic, while simultaneously providing sites with support staff.

As a part of this project, a partnership with [Parent University](#) formed. Parent University is a learning community located in North Omaha that partners with parents to ensure family empowerment and stability. Through the leadership of [Tameshia Harris](#), a virtual STEM workshop night was planned in July 2021 for families interacting with Parent University. Undergraduate students from the NE STEM 4U program worked to develop and pack ‘STEM Kits’ (see photo) that included all necessary supplies for a family to engage in developing, testing, and competing with catapults.



Photo by Nik Stevenson

Twelve families tuned in from the comfort of their own home, with 30 youth in total engaged in learning about engineering concepts and building catapults. It was a unique opportunity to incorporate STEM programming through a multi-generational perspective, where the entire family unit worked together. The event lasted an hour and saw families actively participate in the STEM activity... brainstorming, creating, testing, and competing with one another. The successful launch has catapulted the partnership in a positive direction with more events planned soon.



Omaha STEM Ecosystem

Thank you to everyone that attended the Omaha STEM Ecosystem’s 2nd Virtual Roundtable - Building a Thriving STEM Community series. This session was focused on the role that business and education play in providing internships to help build our future workforce. Levi Thiele, Director of Career Development at University of Nebraska Omaha, opened with a presentation on the STEM Community Platform and newly launched Internship page! She challenged the group to continue to post internship opportunities to assure students had access to this vital career exploration experience. Jim Collison, Gallup, moderated a business and education panel discussion around their needs and best practice internship model. We thank our speakers, Nebraska Tech Collaborative, HDR, Olsson, Avenue Scholars, OPPD/Legacy, ACE Mentoring, Girls Inc/Eureka, UNO/ NE STEM 4U, and MCC/Go Network, for highlighting the great internship models that exist in our community.

There were 69 registrations with over 25 different businesses, K-12/Universities, non-profits and community organizations present. We are looking forward to diving deeper into this discussion of building a thriving STEM community in our last Virtual Roundtable Discussion, October 28, 2021. Please join us to share experiences and develop a vision to transform emerging ideas into solutions. This Roundtable discussion and the previous one were recorded and are now on our website. To watch the recordings go to: <https://omahastem.com/roundtables/>. Go to <https://stemplatform.aiminstitute.org/> to check out the new SCP Internship page and to post internship offerings.

Meet the New Quantitative Reasoning Team

[The UNO Mathematics Department](#), in the College of Arts & Sciences, has hired nine faculty members to transform the teaching of algebra, pre-calculus, and general education mathematics courses. The Quantitative Reasoning Team comes from a variety of backgrounds, bringing lifetimes of experience and passion to UNO. We hope that through the STEM TRAIL Center many synergies will develop between QR innovations and other ongoing UNO initiatives. Join the **December 3rd Teaching Practices Session** at 11am for a panel discussion to reflect on the first summer and fall of QR transformations. The QR team looks forward to cooperating with others around Omaha and beyond; please reach out to them to collaborate. The University of Nebraska-Lincoln recently published an article featuring the new hires. [Read it here!](#)



Jeff Depue, MA

Professor Depue joins the Math Department at UNO after teaching at Gretna High School for 13 years. This fall he will be teaching MATH 1120 and MATH 1210. He and his wife have three children, and welcomed a newborn this summer! Outside of school, he enjoys running and golfing.



Keith Gallagher, PhD

Dr. Keith Gallagher is an instructor in the Quantitative Reasoning program in the Department of Mathematics. A West Virginia native, Dr. Gallagher earned his PhD in Mathematics from West Virginia University, researching undergraduate mathematics education. In his spare time, he enjoys reading, running, and playing tennis.



Nicole Infante, PhD

Dr. Nicole Infante is the Director of Quantitative Reasoning and an Associate Professor of Mathematics. Her research interests are centered on student success and communication in the undergraduate mathematics classroom, particularly alternative forms of assessment and gesture use. Dr. Infante is very excited about the changes that are being made in first-year mathematics courses at UNO. Outside the classroom, you can find her baking, running, hiking, canoeing, camping, and generally exploring the world.



Leslie McFee, MS

Leslie McFee was born and raised in Omaha, and is a two-time graduate of UNO. In her own words, “I feel blessed and grateful to have this opportunity.” She and her husband are blessed with two beautiful daughters. She has many interests, (including scrapbooking) but her real hobby is running her daughters around to their activities. Professor McFee has taught high school mathematics for the past 22 years and is ready to start her new adventure at UNO as a mathematics instructor.



Kenzi Medeiros, MAT

Professor Kenzi Medeiros joins the UNO Mathematics Department after teaching secondary mathematics for several years and as an instructor for Methodist Hospital during the last year. She loves teaching and facilitating math discussions, and is eager to further research the impact of active learning and multiple methods of solutions in the mathematics classroom. Outside of the classroom, she enjoys spending time with her husband and four children.



Linda Rau, MAT

Linda Rau, an Omaha native, taught at the high school level for 23 years. She has now joined the UNO Mathematics Department and is a new instructor for Math 1370 and Math 1220. She earned her bachelor's degree in Secondary Mathematics Education from the University of Nebraska Lincoln and her Master's degree for Teachers of Mathematics at UNO. Outside of teaching she enjoys time outdoors with her husband and daughters and training her 1-year-old Vizsla.



Melissa Riley, MS

Melissa Riley is an instructor within the UNO Mathematics department. She earned her master's degree in Mathematics and bachelor's degrees in Mathematics and Secondary Education at the University of Nebraska Omaha.



Gregory P. Sand, PhD

Dr. Gregory P. Sand is joining the UNO Mathematics Department after spending 25 years in public schools, working with students ranging from elementary to graduate level. By employing a variety of teaching techniques, he promotes an active learning environment that creates opportunities for students to reason and make sense of ideas. Additionally, Dr. Sand is a qualitative researcher who finds joy in telling the story behind the data. He and his wife are parents of 4 and grandparents of 6; they spend their time enjoying the outdoors, whether paddle boarding on a lake or off-roading on mountain trails.



Larissa B. Schroeder, PhD

Dr. Larissa Schroeder is joining the UNO Mathematics Department after 10 years at the University of Hartford, where she taught mathematics education and introductory-level courses. She has been a PI on three NSF grants, including the most recent, Supporting and Sustaining Scholarly Mathematics Teaching. Her research focuses on the scholarship of teaching and learning (SoTL) and using SoTL research to improve mathematics instruction; however, her true love is teaching with the goal of getting students interested in and excited about mathematics. In her spare time, Dr. Schroeder likes swimming (a lot), hiking, and woodworking. She is looking forward to exploring a new part of the country.



Karina Uhing, PhD

Dr. Karina Uhing is a new Assistant Professor in the Math Department. She received her PhD in Mathematics from the University of Nebraska—Lincoln in May 2020. Her research focuses on the relational dynamics and cultural shifts involved in implementing evidence-based teaching practices. Dr. Uhing is excited to be involved in the ongoing curriculum redesign efforts in the Math QR courses at UNO.

CyncHealth 2021 Annual Conference

September 20-21

CyncHealth will be hosting their 2021 annual conference on September 20 - 21 at Omaha's CHI Health Center. Christine Cutucache, PhD, and Joy Doll, OTD, OTR/L, FNAP will be hosting a breakout session, "People Power: Building the STEM Pipeline for Today and Tomorrow," on September 21 from 10:15 - 11:15 am. For more information and to register, [visit their website here](#).

Resources & Opportunities



The Center for Innovation, Entrepreneurship & Franchising is hosting [Breakthrough Weekend](#) on September 24th-26th. This is a great opportunity for students to network with business professionals, interact with other high-achieving students, and learn a great deal about starting a business. It's a FREE event!



Photo by Vineeth Kumar on Unsplash

STEM Scramble!

ATSN _____

SPYCHIS _____

GDGGIN _____

NUTSNEL _____

OITHARGML _____

Need a hint and curious why these words matter this month?

[Check it out!](#)



**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



[Join Our Email List](#)

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

STEM TRAIL Center unostemtrailcenter@unomaha.edu
6705 Dodge Street, Thompson Alumni Center 204 | Omaha, NE 68182
402.554.3459 | unomaha.edu | stemtrail.unomaha.edu

The University of Nebraska does not discriminate based on race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation in its programs, activities, or employment. UNO is an AA/EEO/ADA institution. For Title IX concerns, please contact the Title IX Coordinator (phone: 402.554.2120). For ADA/504 accommodations or assistance, please call/contact the ADA/504 Coordinator (phone 402.554.2463) or the Accessibility Services Center (phone: 402.554.2872).

UNIVERSITY OF
Nebraska
Omaha