



## UNC Research Pulse

Office of Research & Sponsored Programs Newsletter  
October 2021

### Welcome to the First Triannual ORSP Newsletter



My name is Jeri-Anne Lyons and I joined UNC in July 2020 as the Associate Vice President of Research and Dean of the Graduate School. As with much of life in the past year, my time was spent meeting faculty and student researchers in the virtual world. I am excited to be on campus and have the opportunity to meet and interact with everyone in the physical

world.

I spent much of my first year here at UNC learning and understanding the needs of our researchers. My goal is to expand research support and services to meet the campus goal of reclaiming and sustaining R2 status, as defined by the Carnegie Research Classification. While considerable progress has been made, there is much that remains.

With the team of research professionals in ORSP, we have a number of initiatives to roll out in the coming year, including:

- \* PI Academy, to assist researchers in moving their funding aspirations forward
- \* Incubation Labs to foster collaboration and Team Science
- \* Targeting funding opportunities to the research interests of our faculty. If you are interested in receiving these, fill out the [UNC PI Information Sheet](#).
- \* Providing mentoring opportunities to graduate and undergraduate students
- \* Further exploration of our research computing needs, in collaboration with IM&T and an advisory group of faculty users.

Please feel free to reach out me ([jeri.lyons@unco.edu](mailto:jeri.lyons@unco.edu)), Chris Saxton (Director of Sponsored Programs; [chris.saxton@unco.edu](mailto:chris.saxton@unco.edu)) or the ORSP office ([orsp@unco.edu](mailto:orsp@unco.edu)) with any questions regarding these exciting opportunities.

### **Faculty Research Spotlight**

Dr. Chelsie Romulo, Assistant Professor in Environmental and Sustainability Studies, recently discussed her research with ORSP. Her research spans several resource management contexts, but consistently seeks to understand what works and why to explain how contextual characteristics results in impacts and outcomes. She is currently PI of a \$1M NSF IUSE grant studying machine learning techniques as an assessment tool to understand how students learn complex sustainability topics in the Food-Energy-Water-Nexus. The study is a proof of concept and first step for assessing learning. She is working with collaborators at Michigan State University to develop a “next generation concept inventory”, where students can construct a response rather than the multiple-choice questions that are typically used. The two groups are working to combine two existing processes—concept inventory development and machine learning tools—to create an algorithm that will evaluate a constructed or short answer response. Says Romulo, “The fun thing with these machine learning algorithms is, not only do we get just a right or wrong answer, ... but we also get a lot more nuance about how students connect ideas and where there are potentially barriers to connections based on understanding of terminology or concepts, ... [helping to] identify where are they struggling to make that jump to a deeper understanding is really what I'm excited about”. Learn more about Dr. Romulo’s research [here](#).

### **Student Research Spotlight**

Sport and Exercise Science doctoral students Raquel Busekrus, Salah Sharif and Brandon Jones, working with David Hydock, Ph.D., recently completed work characterizing the effect of creatine supplementation in managing Doxorubicin (DOX)-induced muscle fatigue.

This work was funded by the American Cancer Society (“Creatine Supplementation in Managing Doxorubicin-Induced Muscle Fatigue,” American Cancer Society, Pilot and Exploratory Projects in Palliative Care of Their Families).

Further information about Raquel, Salah and Brandon and their research can be found on the [ORSP Student Research Highlight webpage](#).

### **New Undergraduate Research Opportunity**

This summer, the Office of Undergraduate Research collaborated with the Graduate School and the Office of Research and Sponsored Programs to pilot a funded research mentorship program that connected graduate student mentors with undergraduate student mentees. Mentors and mentees were selected from a variety of diverse identities, educational backgrounds and developmental levels based on their capacity for growth and their passion for developing rigorous, innovative and ethical research contributing to the evolution of their respective fields.

Based on the success of this summer’s pilot, the program will continue into the current academic year. If you are interested in participating in this mentorship program this fall, please find the information and application on the [Undergraduate Research Mentorship Program webpage](#). Graduate student mentors were selected in September. Applications

for undergraduate participants will be due Oct. 8. Please direct your questions to [Luke Steinman](mailto:Luke.Steinman@unco.edu) at [luke.steinman@unco.edu](mailto:luke.steinman@unco.edu) or [Yessica Rodriguez](mailto:Yessica.Rodriguez@unco.edu) at [our@unco.edu](mailto:our@unco.edu).

### **Meet your Research Liaison**

With the support of campus leadership, we recently established College Research Liaisons. The research liaisons are your conduit to ORSP, helping us meet your needs. They will also serve as an advisory body to me and ORSP, assisting us in identifying and implementing relevant support and programs to provide for the diverse needs of our faculty scholars.

Thank you to the following faculty for agreeing to serve in this vital role:

- \* Dr. Robyn Hess, College of Education and Behavioral Sciences
- \* Dr. Britney Kyle, College of Humanities and Social Sciences
- \* Dr. Jodie Novak, College of Natural and Health Sciences
- \* Dr. Daniel Brannon, Montfort College of Business
- \* Jayne Blodgett, Libraries
- \* Dr. Sarah Off, College of Performing and Visual Arts

### **Research Compliance**

ORSP is charged with ensuring UNC remains in compliance with federal research regulations and institutional policies. Please contact ORSP as soon as you know you are considering submitting a funding application so we can assist you in ensuring that compliance needs are met. Contact:

- \* Nicole Morse ([Nicole.morse@unco.edu](mailto:Nicole.morse@unco.edu)) for research involving human subjects or questions about Streamlyne
- \* Laura Martin ([laura.martin@unco.edu](mailto:laura.martin@unco.edu)) for research involving animals
- \* Chris Saxton ([chris.saxton@unco.edu](mailto:chris.saxton@unco.edu)) for other compliance needs

### **Required Training in Human Subjects Research**

Federal Regulations require that all research personnel have the necessary knowledge and understanding of the underlying ethical principles of human subjects research. All research personnel working with participants and/or identifiable participant data must be listed on the IRB protocol and maintain current human subjects training. Training must be successfully completed prior to receiving IRB approval and must be renewed every four years. For more information, please visit the [IRB Training Requirements website](#).

> Important reminder! All student IRB protocols automatically route to their listed Faculty Research Advisor for approval of the submission before the protocol routes to the IRB for review. Advisors, please watch for Streamlyne notifications in your email indicating that an action is needed on your part. For instructions on how to approve a student project as their advisor, please read the [Streamlyne IRB Module Tip Sheet](#).

> New master's graduate students: If you are unable to login to Streamlyne with your student email address and password, please contact Nicole Morse, at [nicole.morse@unco.edu](mailto:nicole.morse@unco.edu) or 970-351-1910, with your Bear number and program of study,

to be opted into the system.

New to Streamlyne and need to submit an IRB protocol?  
Check out the [video training](#) for how to initiate and submit a new IRB protocol.

### **Animal Research Facility (ARF)**

Tim Stitt, Animal Research Facility Manager, is here to help with any animal research needs and to answer your questions. Contact Tim before starting a new study or submitting a funding application to ensure that ARF can accommodate your needs.

A reminder that anyone working with animals, including faculty, staff and students, is required to submit an Occupational Health Form to Environmental Health and Safety (EHS). The required form can be found here:

- \* [Animal Research and Facility Exposure Assessment Form](#)
- \* [Animal Research and Facility Employee Exposure Information Update Form](#)

### **Have a suggestion or comment about ORSP?**

You can leave anonymous feedback on the [Customer Satisfaction Survey webpage](#).

