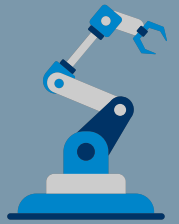
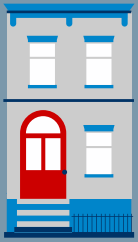
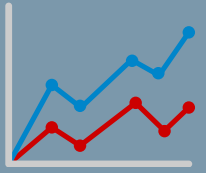
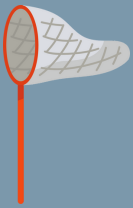
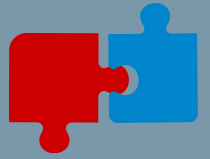


# 2025 Florida Statewide Symposium



## Best Practices in Undergraduate Research

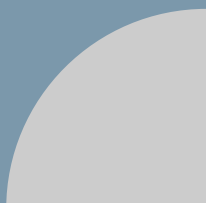
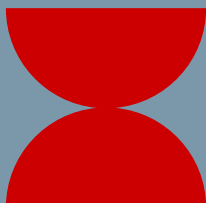
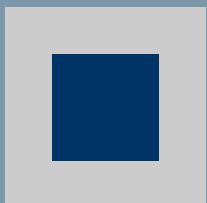


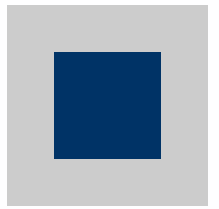
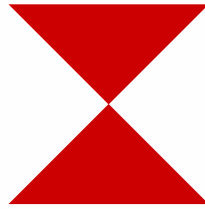
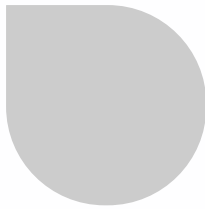
**Oct  
17 & 18**

**Undergraduate Research and Inquiry  
Florida Atlantic University  
Boca Raton, FL**



[fau.edu/our/fss2025](http://fau.edu/our/fss2025) | [floridaundergradresearch.org](http://floridaundergradresearch.org)



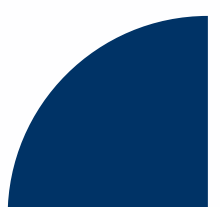
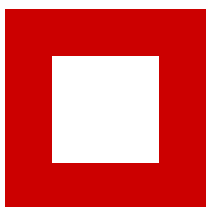


# *Welcome*

Florida Atlantic is proud to welcome faculty, administrators, and staff from across the state to the **18th Annual Florida Statewide Symposium** on Best Practices in Undergraduate Research. Over the next two days, we'll engage in dynamic conversations around best practices, data-driven insights, and strategies for strengthening undergraduate research. This is a space for collaboration, connection, and creative problem-solving.

This year marks a milestone for FAU. We've earned Carnegie R1 designation for very high research activity, been ranked a Top 100 public university by *U.S. News & World Report*, and celebrated 60 years of advancing opportunity and excellence across South Florida. These achievements reflect our commitment to bold ideas, impactful research, and expanding access. And we're just getting started.

We're honored to host this year's symposium and hope our campus inspires new partnerships, shared solutions, and lasting connections.





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## Abbreviations

**SFC/SF** = Schmidt Family Complex (Building #103)

**BU** = College of Business Building (Building #86)

**OD** = Office Depot Center for Executive Education (Building #93)

**FURA** = Florida Undergraduate Research Association

**FURC** = Florida Undergraduate Research Conference

**P@C/PATC** = Posters at the Capitol

**FSS** = Florida Statewide Symposium (this event!)



# Acknowledgements

We recognize the exceptional individuals and organizations who made this conference not only possible, but successful.

*We  
Appreciate  
you!*

**Dr. Jack Bringardner, Colorado School of Mines**

For delivering a powerful keynote on expanding access to undergraduate research—and challenging us to think bigger about opportunity and impact.

**Dr. Russel Ivy, Interim Provost and Vice President for Academic Affairs**

For your thoughtful remarks and continued support of student scholarship.

**University of Central Florida**

For your ongoing partnership and leadership in hosting this event every other year, and for helping build a statewide culture of undergraduate research excellence.

**Speakers and Presenters**

For sharing your expertise, perspectives, and innovations with us.

**The Florida Undergraduate Research Association**

For being the nexus where good ideas about undergraduate research come to life.

**The Florida Atlantic University Division of Research & College of Business**

For your generous support of this event and belief in the mission to empower bold ideas and drive meaningful impact through undergraduate research.

**OURI Student Volunteers**

For your energy, enthusiasm, and behind-the-scenes work that brought this experience together—and for championing the impact research has had on you.

**OURI Staff**

For making it all happen.

**Attendees**

For showing up with curiosity, confidence, and a commitment to growth. Your presence is what makes this conference truly powerful.



*Thank you  
very much!*





# Campus Maps & Parking

For **Friday, October 17** parking, the **Schmidt Family Complex/SF 103** is directly connected to Parking Garage III (PK 103), located just west of FAU Stadium. Free parking is available only on the fourth floor of PK 103 for registered Symposium attendees. All other floors require payment.

After parking, use the elevator at the southeast corner of the garage to reach the first floor

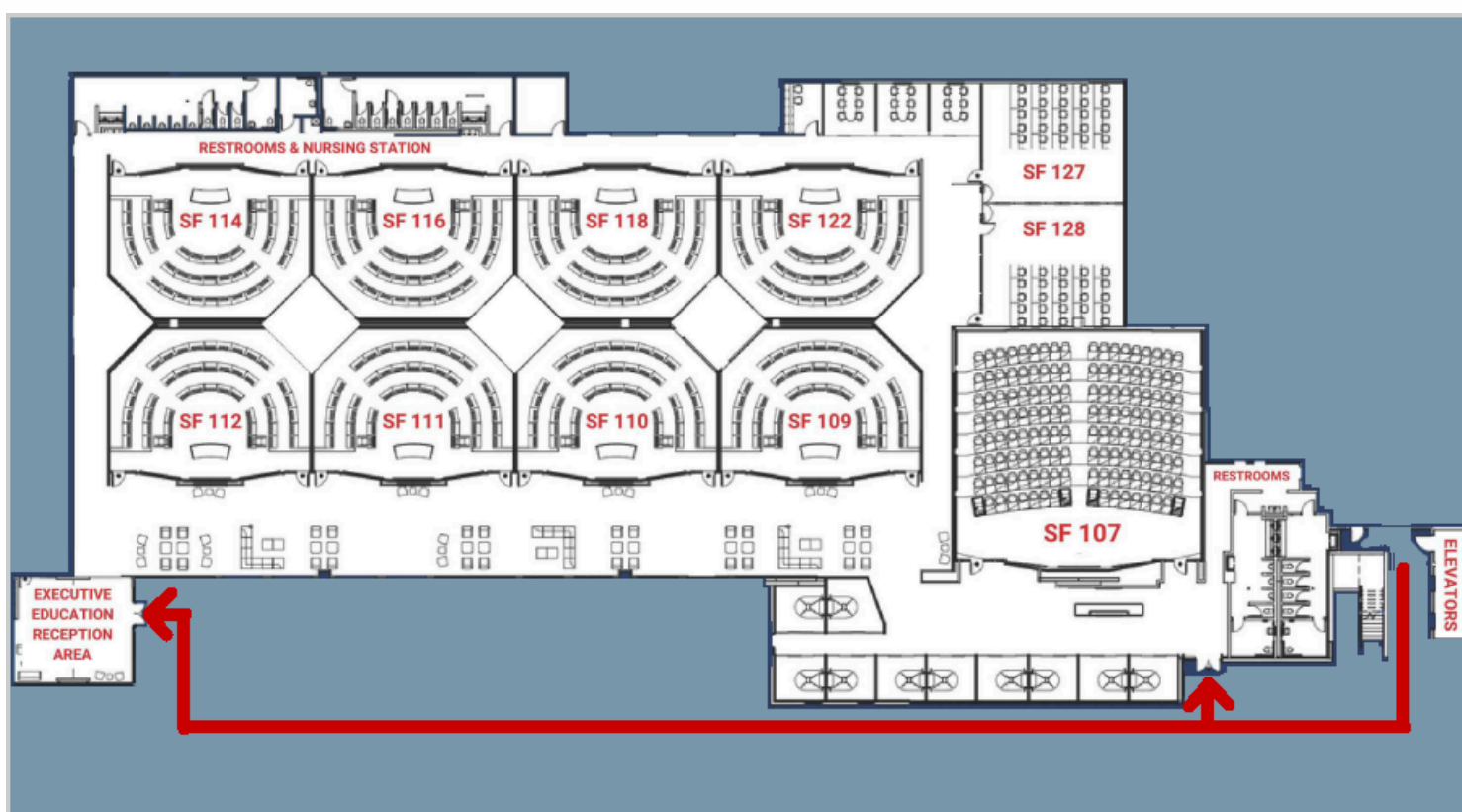
For **Saturday, October 18** parking, **Lot 7** is in front of the Office Depot Complex for Executive Education/Sean Stein Pavilion.

- **Do NOT** park in red spaces.
- **Do NOT** back into parking spaces.
- Maximum speed limit on-campus is **25 mph** unless otherwise posted, and 10 mph in parking lots, unless otherwise posted

Please remember to lock your vehicle and secure your valuables.

Additional information is available at [fau.edu/parking/](http://fau.edu/parking/).

## Schmidt Family Complex Room Layout





# Directions

## If you are taking I-95...

### From I-95 Northbound

1. Take Exit 45 (Glades Rd).
2. Head EAST on Glades Rd.
3. Turn LEFT at NW 10th Ave. / W University Dr. (main FAU entrance).
4. Continue as the road curves right into N University Dr.
5. Make a LEFT onto the unnamed access road to enter PK 103

### From I-95 Southbound

1. Take Exit 48A (Spanish River Blvd / FAU Blvd).
2. Continue STRAIGHT through the light at Spanish River Blvd.
3. Turn RIGHT onto N University Dr.
4. Turn RIGHT at the football stadium.
5. Turn RIGHT again at the unnamed access road to enter PK 103.

## If you are taking Florida's Turnpike...

### From Florida's Turnpike

1. Take Exit 75 (Glades Rd).
2. Head EAST on Glades Rd.
3. Turn LEFT at NW 10th Ave. / W University Dr. (main FAU entrance).
4. Continue as the road curves into N University Dr.
5. Make a LEFT onto the unnamed access road to enter PK 103.

If you are using a rideshare, please inform your driver that the venue is just west of FAU Stadium to avoid being dropped off at the wrong location.



# Schedule Overview

Friday, Oct. 17 – Schmidt Family Complex

TIME	EVENT	PRESENTER(S)	LOCATION
Noon to 2:00PM	Registration		SF Lobby
2:00 to 2:30PM	Welcome and Opening Remarks		SF 107
2:30 to 3:45PM	<b>Keynote:</b> Institutional Transformation through Vertically Integrated Projects	<b>Dr. Jack Bringardner,</b> <i>Colorado School of Mines</i>	SF 107
3:55 to 4:15PM	Mini Presentations (20 minutes)		
4:25 to 5:10PM	Interactive Presentations (45 minutes)		
5:25 to 7:00PM	Poster Session		SF Lobby
7:00PM	Dinner on your own		

Saturday, Oct. 18 – Sean Stein Pavilion

TIME	EVENT	PRESENTER(S)	LOCATION
8:15 to 9:00AM	Coffee and Conversation		Sean Stein Pavilion
8:15 to 8:50AM	FURC Open Planning Meeting		OD 102
9:00 to 10:00AM	Promoting Undergraduate Research in Florida: Recent FURA Initiatives	<b>Latika Young,</b> <i>Alicia Batailles,</i> <i>Wendy Pioquinto,</i> <i>Dan Beugnet</i>	OD 101
10:10 to 10:55AM	Interactive Presentations (45 minutes)		
11:00 to 11:20AM	Mini Presentations (20 minutes)		
11:30 to 11:50AM	Mini Presentations (20 minutes)		
11:50AM to 12:45PM	Lunch		Sean Stein Pavilion
12:45 to 1:30PM	Interactive Presentations (45 minutes)		
1:40 to 2:00PM	Mini Presentations (20 minutes)		
2:10 to 2:30PM	Mini Presentations (20 minutes)		
	End of Event		





# Keynote

## Institutional Transformation through Vertically Integrated Projects: Leadership Practices for Scalable Undergraduate Research



Dr. Jack Bringardner is a Teaching Professor and the Director of Education Innovation at the Colorado School of Mines. He is Co-Director of the Vertically Integrated Projects (VIP) program at Mines and an Executive Steering Committee member of the VIP Consortium. With a background in curriculum design and experiential learning, he champions scalable, high-impact undergraduate research experiences that promote student success and professional development. Prior to working at Colorado School of Mines, he was the Assistant Dean for

Academic and Curricular Affairs and Director of VIP at the NYU Tandon School of Engineering. At NYU, the VIP Program grew from 5 teams and 25 students to 50 teams and 750 students. Jack represents [the VIP Consortium](#) as an ambassador, supporting engagement with new and prospective program sites.

### Abstract

Undergraduate research is a high-impact educational strategy, but scaling it institution-wide requires thoughtful leadership, infrastructure, and sustainable design. In this keynote, I will share how [Vertically Integrated Projects](#) (VIP) serve as a powerful model for embedding long-term, interdisciplinary, credit-bearing research into the heart of the curriculum. Highlighting lessons from implementation across multiple institutions, including team structure, curriculum integration, and administrative support, attendees will learn how VIP programs can empower faculty and student innovation, catalyze institutional change, and scale experiential learning.

Key themes include:

- The vital role of leadership and administrative champions in launching and sustaining VIP programs.
- Structural models for integration into curriculum, faculty load, and course administration.
- Recruitment frameworks that welcome students across disciplines and academic levels.
- The value of consortium networks and shared resources for institutional capacity-building.

Attendees will leave with a practical roadmap to design or expand VIP initiatives that align with their institutional goals and support a culture of experiential learning and scholarship.





# Day One - Schedule

Friday, Oct. 17 – Schmidt Family Complex

TIME	EVENT	PRESENTER(S)	LOCATION
Noon to 2:00PM	<b>Registration</b>		<b>SF Lobby</b>
2:00 to 2:30PM	<b>Welcome and Opening Remarks</b>		<b>SF 107</b>
2:30 to 3:45PM	<b>Keynote:</b> Institutional Transformation through Vertically Integrated Projects	<b>Dr. Jack Bringardner,</b> Colorado School of Mines	<b>SF 107</b>
3:55 to 4:15PM	<b>Mini Presentations (20 minutes)</b>		
	Advancing First-Generation Student Success Through Undergraduate Research	<b>Cassandre Horne,</b> <i>Lenny Chiang-Hanisko</i>	SF 109
	Be the Spark: Empowering Undergraduate Research Offices to Build Interdepartmental Programs	<b>Vanina Zack</b>	SF 110
	Conference Attendance Increases Undergraduate Student Research Identity, Self-Efficacy, and Skills, Especially for Underrepresented Groups	<b>Alanna Lecher,</b> <i>Melissa Lehman</i>	SF 111
4:25 - 5:10pm	<b>Interactive Presentations (45 minutes)</b>		
	Preparing and Conducting Responsible Human Subject Research: Doing Research WITH People, not ON Them	<b>Starlette Sinclair</b>	SF 109
	From Insight to Impact: Systematic Tracking of HIPs Across Campus	<b>Kimberly Schneider</b>	SF 110
5:25 - 7:00pm	<b>Poster Session</b>		<b>SF Lobby</b>
	A Metacognitive Strategy to Improve Lab Report Writing	<b>Cassandra Korte,</b> <i>Melissa Lehman</i>	
	Choose Your Own Adventure: Mini Journal Club for Undergrad Molecular Biology	<b>Kimberly Rowland</b>	
	Teaching Statistical Literacy through an Excel Class Project	<b>Patricia Berchiolli,</b> <i>Omar Babun Codorniu</i>	
	The HIP Scholars Program Model: Exploring Pathways for Student Success	<b>Sarah Davenport,</b> <i>Kimberly Schneider</i>	
	Teaching Research Practices With Scientific Research Misrepresented in the Media	<b>James Clark</b>	
	Undergraduate Research Beyond the Classroom: Assessing Student Choices in a Scholarship Badge Program	<b>Kristen Migliano</b>	
	Florida's Rising STRs: Undergraduate Researchers Putting Advocacy into Action	<b>Alison Hudson,</b> <i>Julie Torruellas Garcia</i>	
	Course Corrections: Five Years of Research-Intensive Courses at UCF	<b>Alison Hudson,</b> <i>Kimberly Schneider</i>	
	Wings of Change: Modeling Natural Selection through Paper Airplane Experiments	<b>Wayne Law</b>	
	Assessing the Value of Undergraduate Research through the Lens of Students in Research-Focused Biology Courses	<b>Julie Torruellas Garcia,</b> <i>Emily Schmitt Lavin,</i> <i>Julia St. Clair</i>	
	Animal Behavior Observation as a Gateway to Scientific Inquiry for Non-majors	<b>April Watson</b>	
7:00PM	<b>Dinner on your own</b>		



## Day One - Schmidt Family Complex

3:55 to 4:15PM | Mini Presentations (20 minutes)

### Advancing First-Generation Student Success Through Undergraduate Research

**Cassandra Horne, PhD, & Lenny-Chiang-Hanisko, PhD**

Florida Atlantic University

Room #  
SF  
109

Engaging first-generation college students in undergraduate research requires comprehensive strategies that address both unique challenges and opportunities for this population. Many first-generation students face barriers, including limited awareness of research opportunities, uncertainty about their place in academic spaces, and balancing significant work or family obligations. Effective student engagement begins with intentional outreach, making research opportunities visible and accessible through faculty encouragement, mentorship programs, and direct invitations. Close faculty mentorship and structured onboarding play vital roles in building students' confidence, providing tailored guidance, and fostering their identity as research scholars. This project provides an example of how faculty involve first-generation undergraduate students in their research. Through clinical immersion, undergraduate students engage in implementing research methodology and understanding how to integrate it into their professional clinical practice. Interdisciplinary and community-based research experiences also allow students to apply their knowledge to real-world issues, engage with participants and amplify the relevance and impact of their work. Furthermore, partnerships with campus resource offices, such as the Office of First-Generation Student Success, and cross-departmental collaborations can extend support networks and broaden access to research opportunities. Collectively, these approaches promote greater equity, persistence, and achievement by creating environments where first-generation students feel they are valued and included as research learners and contributors. By centering inclusivity, mentorship, and accessibility, institutions can help first-generation college students thrive in undergraduate research—ultimately strengthening academic success and the higher education experience.

### Be the Spark: Empowering Undergraduate Research Offices to Build Interdepartmental Programs

**Vanina Zack**

University of Miami

Room #  
SF  
110

Universities can expand their range of co-curricular programming through interdepartmental collaboration using offices of undergraduate research as hubs. At the University of Miami Office of Undergraduate Research & Creative Endeavors (UGR), we partner with the Sylvester Comprehensive Cancer Center (SCCC) Office of Education and Training to develop the Sylvester Program for Academic Research & Knowledge (SPARK). SPARK is a three-year cancer research program aimed at engaging a cohort of five undergraduate students per year in cancer research and improving the pipeline of PhD and MD/PhD candidates interested in cancer careers. By leveraging the SCCC's access to faculty and research labs with our access to undergraduate students, we have been able to enhance the student recruitment process, expand the mentor pool, and enrich program deliverables. Beyond the student outcomes, SPARK highlights how collaboration can expand shared goals and foster long-term institutional partnerships. This presentation will explore how undergraduate research offices can form relationships with campus partners to build stronger, more impactful programs, bridge ideas, and maximize institutional resources. The end goal is to have the sum greater than what can be provided by individual units, in our case UGR and SCCC. We will walk you through the development and evolution of the SPARK program, including its structure, challenges, and best practices for building strong partnerships between multiple stakeholders. SPARK can serve as a model for developing foundational interdepartmental collaborations that lead to successful institutional programs to mentor undergraduates in research.



## Day One - Schmidt Family Complex

### Conference Attendance Increases Undergraduate Student Research Identity, Self-Efficacy, and Skills, Especially for Underrepresented Groups

*Alanna Lecher, PhD, & Melissa Lehman, PhD*

Lynn University

Room #  
SF  
111

Numerous studies have demonstrated the positive impacts of undergraduate research experiences on student success. Far less studied is the impact of conference attendance on undergraduate researchers. This study investigated that impact via pre-post surveys of students attending the 2025 Florida Undergraduate Research Conference. Our results show that undergraduate attendees experienced a significant increase in self-efficacy and research identity, but not research community values. Furthermore, all attendees reported improvements in research-related skills, with 90% reporting improvement in all six skill areas measured. These skill improvements were generally greater for underrepresented groups. These results demonstrate the value of including conference attendance in undergraduate research experiences.

### 4:25 to 5:10PM | Interactive Presentations (45 minutes)

#### Preparing and Conducting Responsible Human Subject Research: Doing Research WITH People, not ON Them

*Starlette Sinclair, PhD*

Florida Gulf Coast University

Room #  
SF  
109

This interactive workshop is designed to engage participants in discussions about preparing and conducting ethically responsible research with undergraduate students. Learning objectives include: 1) consideration of the roles of researchers in equitable creation of knowledge in the research enterprise, 2) learning how to apply principles of community based participatory research to recruitment, engagement, and knowledge sharing to foster equitable research practices and 3) identifying how power dynamics show up in the research process.

#### From Insight to Impact: Systematic Tracking of HIPs Across Campus

*Kimberly Schneider, PhD*

University of Central Florida

Room #  
SF  
110

High-Impact Practices (HIPs) are proven to foster student engagement, academic success, and equity. At the University of Central Florida—home to nearly 60,000 undergraduates—we developed a framework to monitor HIP participation across six core areas: Capstone Projects, Experiential Learning, Study Abroad, High-Impact Designated Courses, Learning Communities, and Undergraduate Research. This initiative, driven by collaboration between HIP program leaders and institutional research, created dynamic dashboards offering real-time, disaggregated data to guide faculty and staff in strategic planning and decision-making. Analyzing five years of data (2019–2024), we documented over 205,000 HIP experiences involving nearly 88,000 distinct students across these six areas. Our findings reveal notable trends: traditional students consistently engage more than transfer students; first-generation students show significantly lower participation in learning communities but comparable involvement in other HIPs; and underrepresented students exhibit fluctuating engagement patterns across years. HIP participation increases with academic seniority. HIP participation correlates strongly with improved graduation outcomes for traditional and transfer populations. This model offers a replicable and adaptable framework that institutions can tailor to their contexts and strategic goals.

## Day One - Schmidt Family Complex

SF  
Lobby

5:25 to 7:00PM | Poster Session

### A Metacognitive Strategy to Improve Lab Report Writing

**Cassandra Korte, PhD & Melissa Lehman, PhD**

Lynn University

Laboratory report writing is an essential skill to the emerging STEM researcher. However, students report confusion regarding the structure of such reports and find the experience of writing to be frustrating. One mechanism to improve student success is through comparison and reflection—important metacognitive strategies. To that end, we implemented a pair of laboratory class assignments employing comparison and reflective strategies on lab report writing. In these assignments students are provided with examples of previous student writing and they compare the effectiveness of each report section for strengths and weaknesses. After completion of the comparison activity, students then examine their own lab report writing from a previous class to assess for effectiveness and areas of improvement. This lab series could be easily tailored to multiple levels of STEM curriculum. We invite colleagues to discuss implementation at their own institutions.

### Choose Your Own Adventure: Mini Journal Club for Undergrad Molecular Biology

**Kimberly Rowland, PhD**

Lynn University

Students must engage the primary literature as individuals with confidence and reliability to pursue post-graduate careers in research and medicine. To help address this issue in a junior- and senior-level molecular biology lecture, an active-learning based Mini Journal Club is implemented for the duration of the course. After a viewing and discussion of a typical large-format journal club on video, the students each choose their own literature review “adventure” within set parameters. Class time is given to select and provide justification for choosing two original research articles that are interpreted and presented, after which the students analyze and organize their content. After analysis assignments and isolation of the section(s) that are presented, the students create a 10- minute video of their delivery of the content. After submission, each student receives short follow-up questions that they must answer in written format. Mechanisms, Techniques, Disease Phenotypes, and Cell Signaling are some of the general areas “adventures” can fall under. The course assignments alternate weeks between journal club preparation assignments and the typical content assessments. This gives students the opportunity to have some agency in the topic they choose as well as confidence in the delivery of the material, as well as engaging students in other assessment types beyond typical examinations.

### Teaching Statistical Literacy through an Excel Class Project

**Patricia Berchiolli, PhD & Omar Babun Codorniu, PhD**

Lynn University

Lynn University's core curriculum, The Dialogues, enables students to develop critical thinking, communication, and innovation skills. As part of this curriculum, Introductory Statistics introduces students to key statistical concepts while showing how they can be applied in real-world situations using Excel. The highlight of the course is the Statistics Excel Project, where students create their own dataset with a mix of quantitative and qualitative variables. To keep the focus on learning statistical techniques rather than data collection, students use Excel's random number generator for quantitative data, which also avoids the need for IRB approval. From there, they calculate statistical measures, build frequency and pivot tables, and design charts and graphs to visualize their results. They also form hypotheses, analyze their data, and summarize their findings in a written report. This project gives students an opportunity to see statistics in action, develop practical Excel skills, and gain confidence in using quantitative methods; tools that will prepare them for future research projects and professional work.



## Day One - Schmidt Family Complex

### **The HIP Scholars Program Model: Exploring Pathways for Student Success**

***Sarah Davenport, PhD & Kimberly Schneider, PhD***

University of Central Florida

■

The High-Impact Practices (HIP) Scholars, launched via a Hispanic Serving Institution Title V grant, is an innovative program focused on increasing HIP accessibility. The program is designed to create pathways for student populations who have traditionally had lower engagement in HIPs, including first-generation, Pell Grant-eligible, and transfer students. The program aims to remove barriers to HIP involvement and connect students to other opportunities. The program runs for two semesters. In the first semester (spring), scholars complete the "exploratory phase," during which they learn about and choose between undergraduate research or a non-profit internship. During this time, scholars engage in intentional programming that prepares them for their HIP experience and their post-undergraduate career goals by connecting them with the career center and HIP professionals. This unique structure gives students the opportunity to engage with various options in a supported environment. In the second semester (summer), scholars engage in their HIP experience and become eligible for a \$2000 stipend. Scholars work closely with an assigned peer mentor to guide them through the program. Thus, the program model is designed to educate students on the benefits of each HIP area while providing them with the resources and support to secure a HIP experience. 75% of HIP Scholars accepted into the first three cohorts have successfully completed a HIP experience through the program. HIP Scholars alumni continue to get involved in additional HIPs, and through pre-post survey data, students have reported gaining a greater sense of belonging and career readiness after completing the program.

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### **Teaching Research Practices with Scientific Research Misrepresented in the Media**

***James Clark, PhD***

Lynn University

■

Teaching students scientific literacy is a core requirement at most liberal arts schools. These requirements can be met with subject-specific science classes. However, this approach may be challenging for non-science students, and often fails to cover the concept of scientific misinformation in news media. In the modern era, scientific misinformation can be a significant problem for the general public. This problem is caused in part by irresponsible reporting in the news, and lack of scientific literacy in the intended audience. The general population tends to take media reports at face value, and does not research the scientific sources of news media reports. At Lynn University, we teach core science in our Dialogues of Scientific Literacy series. We make this content interactive so that students can improve their research skills by learning how to find relevant details in scientific sources, identifying when they are being explained accurately. This occurs through a series of scaffolded assignments, each focusing on a different aspect of a research article and how it is represented in the news. This has proven to be a useful tool for teaching an element of scientific literacy and research that is becoming more and more important every day: identifying misinformation. Here, I detail one example of a series of assignments and how this approach has worked to improve scientific literacy among non-science majors at a small liberal arts university.

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## Day One - Schmidt Family Complex

### Undergraduate Research Beyond the Classroom: Assessing Student Choices in a Scholarship Badge Program

**Kristen Migliano, MBA, PhD**

Lynn University

■

This study examines undergraduate students' preferences in completing tasks designed to demonstrate proficiency in research and scholarship. Using university-wide data collected from students participating in the Academic Enhancement and Scholarship badging program, the analysis identifies which activities students most frequently choose and how these preferences align with the learning objectives of these academic skill-building opportunities. Tasks completed by students contribute toward earning a digital badge that recognizes engagement in scholarly learning experiences. Findings offer insights into how students approach skill development, information literacy, research, and which activities they perceive as most meaningful. The study also recommends how institutions can better support co-curricular pathways for undergraduate research and scholarship. This work contributes to understanding student motivation and offers evidence-based guidance for developing co-curricular experiences for student scholarship.

□

### Florida's Rising STRs: Undergraduate Researchers Putting Advocacy into Action

**Alison Hudson, PhD & Julie Torruellas Garcia, PhD**

University of Central Florida & Nova Southeastern University

■

The decline in federal research funding makes advocating with funding bodies and lawmakers an increasingly urgent task for the organizers of undergraduate research initiatives. Undergraduate researchers themselves can be important voices in this effort: they are often some of the best advertisements for the power of undergraduate research. This poster will present a case study of 8 undergraduate students from Florida who participated in the 2024-25 Council on Undergraduate Research's advocacy training program – Scholars Transforming Through Research (STR). This program included monthly workshops to develop communication and advocacy skills and culminated in meetings with congressional staffers in Washington DC, where the students' testimony resulted in requests for further data, a visit to a research showcase by a staffer from a representative's local office and a video made by a local congresswoman that was shared at an undergraduate research symposium to support and encourage student researchers. This poster will highlight the key aspects of the students' preparation that impressed staffers: their brevity; their ability to connect their research to wider issues (that also happened to be lawmakers' priorities); and collaboration between the students that allowed them to weave their stories together into a powerful demonstration of how transformative research opportunities can be and what is lost when access to research training is limited. We hope this case study can form a model for advocacy efforts to incorporate students, both at the state and national level.

□



## Day One - Schmidt Family Complex

### **Course Corrections: Five Years of Research-Intensive Courses at UCF**

***Alison Hudson, PhD & Kimberly Schneider, PhD***

University of Central Florida



Course-based Undergraduate Research Experiences (CUREs) are now a nationally recognized strategy of expanding research capacity, encouraging student retention, and breaking down barriers to research opportunities. Inspired by Florida Atlantic University's (FAU's) CUREs— called Research-Intensive (RI) courses— the University of Central Florida (UCF) created a similar system of rubrics to enable faculty to identify, submit, and evaluate CUREs. This poster reports on data from the first five years of RI courses at UCF. This poster will cover both data on RI courses and their impact on UCF's campus, along with lessons learned and modifications that have been made to the program as it was implemented. For example, the initial rubric has been modified for clarity and to include a wider range of outputs, based on the experience of initial review cycles. Questions that faculty review committees repeatedly asked also led us to rework wording on the submission form and to recast the required RI syllabus statement. We have also implemented two rounds of reviews for courses 5 years after they were designated, to try to glean what faculty have learned from teaching them and to ensure they are still being taught as Research-Intensive. The poster will conclude with future directions, including attempts to expand RI courses more evenly across colleges and departments and to pipeline students from RI courses to co-curricular opportunities, since RI courses serve a larger and more varied population than traditional co-curricular research.

### **Wings of Change: Modeling Natural Selection through Paper Airplane Experiments**

***Wayne Law, PhD***

Lynn University



Students in non-science fields often harbor a fear of scientific inquiry, perceiving it as overly complex and inaccessible. This project addresses that challenge by introducing fundamental research methods and the scientific method through a low-stakes, hands-on activity. The objective is to foster confidence and familiarity with empirical research by guiding students from a conceptual understanding to practical application. This instructional model follows a three-stage progression. First, students analyze a simple, published experiment to identify and discuss the components of the scientific method in a guided, familiar context. Next, they participate in an instructor-led experiment comparing two different paper airplane designs, formulating hypotheses about their flight performance. The final stage empowers students to become independent researchers: they design and build their own paper airplanes, systematically modifying a single variable (e.g., wing shape, tail size) three times. For each iteration, students measure the flight distance and use that data to graphically represent how their modifications influenced performance. This process illustrates the core principles of natural selection, with the selection pressure being the ability to fly further. By experiencing how small changes can lead to a "fitter" outcome and then quantifying those results, students grasp the principles of variation and selection in an intuitive, data-driven way. This method successfully demystifies the research process, showing that meaningful scientific inquiry is accessible to all.



## Day One - Schmidt Family Complex

### **Assessing the Value of Undergraduate Research through the Lens of Students in Research-Focused Biology Courses**

**Julie Torruellas Garcia, PhD, Emily Schmitt Lavin, PhD, & Julia St. Clair**

Nova Southeastern University



Undergraduate research offers numerous benefits that extend beyond traditional classroom learning. It fosters critical thinking, enhances problem-solving skills, and provides hands-on experience that can deepen students' understanding of their field. Participating in research also helps students build confidence, develop communication skills, and gain a clearer sense of their career goals. In addition, involvement in research has been linked to increased retention in STEM fields and higher likelihood of pursuing graduate education. Given these potential advantages, it is essential to assess undergraduate research-focused courses to ensure that students are truly experiencing these benefits. Specifically, we evaluated research-focused courses in the Department of Biological Sciences at Nova Southeastern University, including Independent Study, Internship, and Practicum in Biology I and II. Since 2017, students in these courses have been given pre- and post-reflection surveys with questions that included what they expected to gain from the course (pre) versus how they benefitted from the course (post). The anonymous responses will be codified using 8 categories based on the work of Hunter et al. 2007: thinking/working like a scientist; becoming a scientist; personal-professional (i.e. confidence); clarification of career paths; enhanced career/graduate school preparation; skills (i.e. communication); generalized gains; and working independently. The frequency and distribution of reported benefits will be analyzed to help identify any categories of benefits that appear underrepresented or absent in student experiences and can guide improvements in course design and mentorship practices. This study can also serve as a model for assessment that can be adopted at other institutions.

### **Animal Behavior Observation as a Gateway to Scientific Inquiry for Non-majors**

**April Watson, PhD**

Lynn University



Undergraduate science educators often face challenges when designing hands-on assignments that are both engaging and accessible for non-science majors. These challenges are heightened in today's varied course structures, which may be in person, online, or hybrid, and in formats ranging from four to sixteen weeks. In compressed courses, the need for meaningful yet straightforward research experiences are especially pressing. At Lynn University, the Scientific Literacy course meets daily for two and a half hours over four weeks. To provide authentic research within this time frame, I implemented animal behavior observation projects. Students are introduced to ad libitum and focal animal sampling, as well as continuous and scan recording methods. They also learn how to construct and apply ethograms to organize behavioral data. After two in-class labs to practice these skills, students design and carry out independent observation projects, presenting their findings as a part of their final project. Animal behavior research offers an ideal entry point for non-majors: it requires minimal equipment, is easy to implement across instructional formats, and connects to everyday experiences with animals. Integrating these assignments has helped clarify the process of scientific inquiry and provided students with confidence in applying research methods. This project demonstrates that focusing on the process of designing behavioral observations can be an effective approach to promoting scientific literacy among non-science students in compressed course structures.



# Day Two - Schedule

TIME	EVENT	PRESENTER(S)	LOCATION
8:15 to 8:50AM	Coffee and Conversation		Sean Stein Pavilion
8:15 to 9:00AM	FURC Open Planning Meeting		OD 102
9:00 to 10:00AM	Promoting Undergraduate Research in Florida: Recent FURA Initiatives	Latika Young, Alicia Batailles, Wendy Pioquinto, Dan Beugnet	OD 101
10:10 to 10:55AM	Interactive Presentations (45 minutes)		
	Visualizing Student Success: Dashboard Analytics for OneUSF Undergraduate Research	Saundra Johnson Austin, Greeshma Namana, Karen Garcia-McGowan, Sam Ediger	OD 101
	Creating an Inclusive Environment for Showcasing Undergraduate Students' Work	Judith Ochriotor, Kaitlyn Minnicks	OD 102
11:00 to 11:20AM	Mini Presentations (20 minutes)		
	Enhancing Liberal Arts Research Education with AI	Jenna Molen	OD 101
	Strengthening Undergraduate Research in Nursing Through Faculty Mentorship	Louise Aurelien Buie	OD 102
	Parasites, Pythons, and Pipelines: Building Scientists from Invasive Species	Christina Anaya	OD 203
11:30 to 11:50AM	Mini Presentations (20 minutes)		
	Inclusion of Undergraduate Students in Culturally Sensitive Projects	Cassandre Horne	OD 101
	Summer Undergraduate International Research Program: Blending the Benefits of International Learning with Undergraduate Research	Olivia Tyler	OD 102
	Lighting the Spark: Engaging Early-Career Students in an Introduction to Research Course	Meg Norcia, Santiago Luaces	OD 203
11:50AM to 12:45PM	Lunch		
12:45 to 1:30PM	Interactive Presentations (45 minutes)		
	From Thesis to Defense: Scaffolding Undergraduate Research Methods for Student Success	Kideste Yusef	OD 101
	From Classroom to Fieldwork: Teaching Qualitative Research Skills to Undergraduates	Amanda Osuna	OD 102
1:40 to 2:00PM	Mini Presentations (20 minutes)		
	Learning from Presenting: Students Benefit from Presenting Results of Their Research	Jaclyn Chastain, Santiago Luaces, Charles Gunnels, Lance Barton	OD 101
	Scaling Undergraduate Research through Graduate Student Led Research Teams	Natalia Toro	OD 102
	Leveraging Gamification to Overcome Challenges in Undergraduate Research Motivation and Engagement	Harika Rao	OD 203
2:10 to 2:30PM	Mini Presentations (20 minutes)		
	Early Immersion in Research: A Framework for Supporting First-Year and Transfer Student Success	Lauren Gapczynski, Jennie Soberon	OD 101
	Teaching Cybersecurity and AI Across Borders: From Foundations to Ethics	George Antoniou	OD 102
	Designing Inclusive Summer Research Opportunities: A Model from UCF's SURF Program	Tasnim Mellouli	OD 203
	End of Event		





## Day Two - Sean Stein Pavilion & Office Depot Complex

9:00 to 10:00AM | Promoting Undergraduate Research in Florida:  
Recent FURA Initiatives Including the Upcoming 2026 Florida Undergraduate  
Research Posters at the Capitol

**Visualizing Student Success: Dashboard Analytics for OneUSF Undergraduate Research**  
**Latika Young, EdM, Alicia Batailles, MS, Wendy Pioquinto, MS, & Dan Beugnet, EdD**  
Florida State University & Tallahassee State College

Room #  
OD  
101

This workshop will explore the recent outreach and networking activities of the Florida Undergraduate Research Association, with a special focus on the upcoming 2026 Florida Undergraduate Research Posters at the Capitol. The workshop begins with an introduction to FURA institutional membership and the unique benefits that membership provides, including exclusive access to participation in Posters at the Capitol (P@C). The workshop continues with a comprehensive overview of the 2026 P@C, including the revised timeline and deadlines, selection process, logistical information, event schedule, and student workshop scheduled for mid-November. Next, the presenters share updates from the recent print and web resources proposed and/or developed by the FURA Committee for Outreach. The workshop then considers tips for individual institutions to consider in their own outreach and networking initiatives—for P@C and more generally—including collaborating with their institutional Governmental Affairs office, if available. Finally, time is devoted for participants to brainstorm and share ideas that can be implemented by FURA and/or on their own campuses: how does FURA improve our outreach and networking efforts and resources, and what are other institutions doing successfully on their own campuses?

### 10:10 to 10:55AM | Interactive Presentations (45 minutes)

**Visualizing Student Success: Dashboard Analytics for OneUSF Undergraduate Research**  
**Saundra Johnson Austin EdD, Greeshma Namana, MBA, Karen Garcia-McGowan, DBA, Sam Ediger, MLIS**  
University of South Florida

Room #  
OD  
101

The University of South Florida's (USF) Office of Student Engagement in Research and Innovation (SERI) has developed a suite of integrative dashboards using Power BI to systematically track and analyze the OneUSF Undergraduate Research engagement across its Tampa, St. Petersburg, and Sarasota-Manatee campuses. This practice enhances institutional capacity for data-informed decision-making, fosters a culture of undergraduate research, and promotes access to high-impact learning experiences. The integrative dashboards consolidate data from multiple sources for the 2025 academic year—including a research-based course, faculty-mentored research projects, research conferences and symposia, and social media—to provide a comprehensive overview of participation in OneUSF Undergraduate Research. These analytics empower faculty, department chairs, college deans, and administrators, to monitor progress toward strategic goals, identify gaps in engagement, and assess the impact of research experiences on student outcomes. In alignment with the 2024 Florida Board of Governors Accountability Plan, the integrative dashboards also support transparency by presenting OneUSF Undergraduate Research data in a user-friendly format that informs decisions at departmental, college and university levels. Integrative dashboards are a best practice in higher education assessment and directly support USF's strategic goals related to student and research excellence. Our findings showcase integrative dashboards as a scalable model for enhancing inquiry, innovation, and student success through data-informed undergraduate research engagement.



## Day Two - Sean Stein Pavilion & Office Depot Complex

### Creating an Inclusive Environment for Showcasing Undergraduate Students' Work

**Judith Ochrietor, PhD** & **Kaitlyn Minnicks, PhD**

University of North Florida

Room #  
OD  
102

On campus symposia are excellent ways to showcase student research activities and provide students with an opportunity to practice their communication skills. In many instances, the symposia are in the form of poster sessions, and therefore most presenters are typically in the natural and social science and engineering categories. The University of North Florida has a robust Digital Humanities Institute, and therefore the highest category of presenters, behind natural sciences, is art and humanities. Students who have digitized their humanities projects can easily present their work in a poster format. Oral presentation sessions also expand the ways in which students can share their experiential learning with their community. Other schools, like Northwestern University, have both an undergraduate research conference and a creative arts festival, held together annually as the Undergraduate Research & Arts Expo. At the Creative Arts Festival, students have an opportunity to share creative writing, films, visual art, and performances. Bringing research together with creative activities in this manner has the potential to create an inclusive culture of undergraduate student success on a campus. During this interactive workshop, we will explore the different ways in which offices of undergraduate research showcase student projects at their institutions. We will discuss the feasibility and interest (by college and university communities) of including creative arts presentations to existing poster session formats and learn from each other as we evaluate the inclusivity of experiential learning for undergraduates on our campuses.

### 11:00 to 11:20AM | Mini Presentations (20 minutes)

### Enhancing Liberal Arts Research Education with AI

**Jenna Molen, MEd**

University of Florida

Room #  
OD  
101

Introduction to Research in the Liberal Arts and Sciences is a foundational course designed to equip undergraduate students with the skills and mindset necessary for engaging in mentored research experiences. The course introduces students to the research process across disciplines, emphasizing critical thinking, inquiry, and scholarly communication. To enhance engagement and relevance, I incorporate artificial intelligence tools into assignments and classroom activities. These AI-enhanced components foster creativity, support personalized learning, and simulate real-world research scenarios. This presentation will share strategies for integrating AI into curriculum design and reflect on the pedagogical impact of emerging technologies in liberal arts education.



## Day Two - Sean Stein Pavilion & Office Depot Complex

**Strengthening Undergraduate Research in Nursing Through Faculty Mentorship**  
**Louise Aurelien Buie, PhD**  
Florida Atlantic University

Room #  
OD  
101

Undergraduate research is widely recognized as a strategic pedagogical approach that promotes deep learning, critical inquiry, intellectual engagement, professional development, supporting both student success and the broader mission of higher education institutions. This presentation examines faculty mentorship as an essential means for supporting undergraduate research in nursing. Drawing on a case study of an Honor's student who served as a research assistant for 18 months on a faculty-led project, the presentation illustrates strategies for guiding students through structured research experiences while fostering long-term academic and professional growth. Mentorship is a partnership that bridges academic learning with professional preparation practices. It encouraged the gradual development of core research skills, ranging from data collection and literature synthesis to scholarly dissemination. A key component in the process included supporting the student in securing internal research funding and pursuing scholarships from professional nursing organizations. By aligning mentorship with both institutional and disciplinary resources, the experience reinforced the mutually beneficial relationship between faculty guidance and student advancement. This case highlights practices that are transferable across disciplines, including scaffolding research skill acquisition, integrating students into faculty research workflows, and intentionally connecting students to professional development opportunities. Attention is also given to the practical implications of mentorship for faculty workload, strategies for promoting student independence, and approaches to sustaining undergraduate research pipelines. This presentation demonstrates how faculty investment in undergraduate research contributes not only to student success, but also to broader institutional goals and the development of future nursing scholars.

**Parasites, Pythons, and Pipelines: Building Scientists from Invasive Species**  
**Christina Anaya, PhD**  
Florida Gulf Coast University

Room #  
OD  
203

Florida harbors one of the highest numbers of invasive species in the United States, with non-native reptiles and amphibians such as green iguanas (*Iguana iguana*), Burmese pythons (*Python bivittatus*), cane toads (*Rhinella marina*), and Cuban tree frogs (*Osteopilus septentrionalis*) contributing to ecological disruption. These invaders alter food webs, displace native fauna, and may introduce parasites of concern. While these impacts are serious, they also provide opportunities to create student-driven research experiences that integrate education, community partnerships, and ecological discovery. At Florida Gulf Coast University, the Anaya Laboratory has developed a model that transforms invasive animal removals into undergraduate research projects. Through collaborations with the Conservancy of Southwest Florida, the Macias Wildlife Society of Bonita Bay, Scott's Animal Services, and community contractors in Lee County, carcasses of invasive species are donated for use in senior capstone projects. Teams of four students dissect specimens by organ system to document parasite diversity and calculate prevalence, mean intensity, and mean abundance. Statistical analyses allow students to compare parasite loads between sexes and test correlations between host size and parasite burden, fulfilling their research requirement for graduation. To date, more than 150 students have completed this program and presented their findings at local, regional, and national conferences. A subset of participants continue in the laboratory to mentor incoming cohorts, creating a sustainable pipeline of trained student researchers. This layered approach advances ecological knowledge while fostering experiential learning, peer-to-peer mentoring, and professional skills essential for future careers in science.



## Day Two - Sean Stein Pavilion & Office Depot Complex

11:30 to 11:50AM | Mini Presentations (20 minutes)

**Inclusion of Undergraduate Students in Culturally Sensitive Projects**  
**Cassandra Horne, PhD**  
Florida Atlantic University

Room #  
OD  
101

Culturally responsive research explicitly values local knowledge systems, communication styles and social structures. These types of studies center around experiences and insights of the people and location most affected by the issues under study with emerging outcomes resonantly deeply with people of the culture and community. Partnerships with these communities are essential to this work and it is important to introduce undergraduate students in a manner that is building trust and does not contribute to the feelings of marginalization and exploitation. Through these partnerships, communities can assist with increasing cultural attunement and ethical research practices to help reduce apprehension while improving trust, engagement and quality of data. Beyond traditional ethical practices and fostering respect, there is a need for ongoing immersion, education and understanding of cultural history, expressions, beliefs and current realities for the undergraduate student researcher. Assisting undergraduate researchers in their view of cultural populations as more than data sources but equal partners in the research is critical. Researchers and students should consider factors that can cause participants to feel more vulnerable and being attuned to cultural nuance. Continuous pre-work and post work debrief with student researchers are crucial in their framing of research and its impact within culturally sensitive populations and geographic locations. This requires more than the faculty researcher serving as a gatekeeper, but requires intentional educational reframing. Topics to be addressed include continual need for consent, ethical reflexivity and adapting research methods for cultural relevance and researcher presence.

**Summer Undergraduate International Research Program: Blending the Benefits of International Learning with Undergraduate Research**  
**Olivia Tyler, BA, BBA**  
University of Florida

Room #  
OD  
102

In an increasingly interconnected academic landscape, the Summer Undergraduate International Research Program (SUIRP) offers undergraduates at UF an opportunity to engage in immersive, faculty-mentored research abroad. This program was designed to enhance both disciplinary expertise and cross-cultural competencies, SUIRP complements domestic undergraduate research initiatives by expanding students' perspectives and skills through international collaboration and cultural immersion. The program in a partnership with the UF International Center supports 8–10-week summer research experiences at international research sites across the globe. Students have the sole responsibility of finding a research mentor abroad. The UF CUR office provides structured support while students are abroad. Students report that this experience is one of the most meaningful of their academic careers. Since its launch in 2018, it has supported over 45 students on international research projects. I will share best practices, lessons learned, and the impact these experiences had on our students.



## Day Two - Sean Stein Pavilion & Office Depot Complex

**Lighting the Spark: Engaging Early-Career Students in an Introduction to Research Course**  
**Meg Norcia, PhD & Santiago Luaces, MS**  
Florida Gulf Coast University

Room #  
OD  
203

Undergraduate research is widely recognized as a high-impact practice that supports student retention, persistence, and professional identity formation. However, access to UR is uneven, particularly at the earliest stages of students' academic journeys. According to the 2020 National Survey of Student Engagement (NSSE), fewer than 5% of first-year students report engaging in faculty-mentored research, compared to 25–40% of seniors. This limited early exposure narrows the pipeline of students who might benefit from these experiences, particularly those from non-STEM disciplines or those with different degrees of preparation. To address this gap, we piloted a “spark” class. Rather than focusing on research methods and technical training—the “how” of research—the Spark Class introduces students to the “why.” Through storytelling, faculty & student panels, and interactive activities, the course highlights the motivations, inspirations, and impacts that drive scholarly inquiry. By emphasizing the human and societal relevance of research, the class lowers barriers to entry, fosters curiosity, and invites first- and second-year students to envision themselves as potential contributors to knowledge creation. The culminating project for the course was a “research yearbook”, in which students interviewed advanced undergraduate researchers about their experiences, while developing transferable skills in the process and envisioning their own next steps in their research journeys. This presentation will share our model for the course, preliminary observations of its impact, and plans for future implementation.

### 12:45 to 1:30PM | Interactive Presentations (45 minutes)

**From Thesis to Defense: Scaffolding Undergraduate Research Methods for Student Success**  
**Kideste Yusef, PhD**  
Bethune-Cookman University

Room #  
OD  
101

Undergraduate research methods courses often present unique challenges, particularly if students are encountering the scientific method, theory construction, and data analysis for the first time. This presentation outlines an innovative, scaffolded pedagogical approach designed to incrementally build student capacity in research design and execution, as demonstrated in two-semester, senior-level criminal justice research courses. Rather than presenting research as an abstract, singular task, the course structure breaks down the research process into a sequence of low-stakes, skill-building assignments toward the development of a professional research project. Each stage of the research process— from thesis statement to data collection and analysis, is reinforced through targeted assignments—such as conceptual maps, annotated bibliographies, and literature review scaffolds—that cumulatively prepare students to craft a comprehensive senior research paper. Importantly, the course design emphasizes iterative drafting, peer review, and instructor feedback, allowing students to refine their work at each stage before progressing. By situating each assignment as a stepping stone toward the culminating research paper and defense, the course transforms a daunting capstone requirement into an achievable and empowering academic experience. The session will share assignment models, rubrics, and mapping strategies that faculty across disciplines can adapt to strengthen undergraduate research training, particularly in environments where cultivating inclusive pathways to research excellence remains a pressing priority.

## Day Two - Sean Stein Pavilion & Office Depot Complex

From Classroom to Fieldwork: Teaching Qualitative Research Skills to Undergraduates  
Amanda Osuna, PhD  
University of Tampa

Room #  
OD  
102

Preparing undergraduates to move beyond textbook learning into authentic research experiences requires intentional scaffolding and innovative pedagogy. This presentation highlights strategies for teaching qualitative research methods in ways that actively engage students and build confidence in conducting independent inquiry. Drawing on experiences from undergraduate criminology and criminal justice courses, I demonstrate how activities such as mock interviews, ethnographic observation exercises, transcript coding workshops, and role-play simulations provide students with hands-on practice in core qualitative skills. These structured classroom activities serve as “low-stakes fieldwork,” allowing students to experiment, make mistakes, and refine techniques before undertaking more formal projects. The session will share examples of assignments that move students step by step from foundational concepts to applied research, ultimately culminating in student-designed proposals and mini-studies. Attention will be given to strategies that emphasize ethical considerations, critical thinking, and connections to real-world social justice issues, helping students see themselves as knowledge producers rather than passive learners. Participants will leave with adaptable models for integrating active qualitative research practice into their own courses, as well as insights into how such approaches foster student engagement, deepen learning, and prepare undergraduates to contribute meaningfully to research communities.

## 1:40 to 2:00PM | Mini Presentations (20 minutes)

**Learning from Presenting: Students Benefit from Presenting Results of Their Research**  
*Jaclyn Chastain, MA, Santiago Luaces, MS, Charles Gunnels, PhD, & Lance Barton, PhD*  
Florida Gulf Coast University & Council on Undergraduate Research

Room #  
OD  
101

Every stage of the scholarly process can promote student success, from the initial inquiry to the final interpretation, as students develop skills and self-efficacy that can be applied both in school and after graduation. Many students then present their research at symposiums on- or off-campus as a culminating experience - but does this dissemination piece itself affect student learning? To understand how presenting scholarly research affects students, we sent a self-perception survey to students who had participated in a symposium or conference-type of event across multiple institutions nationwide. Preliminary findings demonstrate that students gained confidence and developed skills related to effectively delivering and interacting with an audience when presenting research. Attending symposia and hearing others' presentations also broadened students' perspectives and strengthened their understanding of effectively communicating research. The results of this study clarify the value of presenting undergraduate research as part of the overall scholarly experience, providing a more complete understanding of undergraduate research as a high-impact practice.



## Day Two - Sean Stein Pavilion & Office Depot Complex

**Scaling Undergraduate Research through Graduate Student Led Research Teams**  
**Natalia Toro, EdD**  
University of Central Florida

Room #  
OD  
102

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This workshop will outline how the University of Central Florida is growing research capacity, supporting undergraduate research, and promoting graduate student professional development through the Knight Research Scholars Program (KRSP). A collaboration between the Office of Undergraduate Research and the Office of Graduate Student Life, based on the successful Aggie Research Scholars Program at Texas A&M, KRSP has grown to 32 projects with positions for over 150 undergraduate students from a variety of disciplines in under five months, with the capacity to grow to hundreds of projects annually. The workshop will overview the need for the program, how the program was developed, programming logistics, as well as challenges and opportunities that can help other institutions institute similar programs.

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**Leveraging Gamification to Overcome Challenges in Undergraduate Research**  
**Motivation and Engagement**  
**Harika Rao, MBA, EdD**  
Lynn University

Room #  
OD  
203

■

In an era where students are increasingly digitally immersed, traditional methods of motivating undergraduate research often fall short of fostering sustained engagement and intrinsic interest. This research explores the innovative potential of gamification as a transformative strategy to address these challenges. By integrating game elements—such as points, badges, leaderboards, and narrative-driven challenges—into undergraduate research curricula, the study aims to create immersive, interactive learning environments that reignite students' curiosity, motivation and engagement. Drawing from interdisciplinary frameworks, including Self-Determination Theory and Flow Theory, the research investigates how gamified platforms influence students' perceptions of autonomy, competence, relatedness and immersion, ultimately enhancing their research participation and persistence. Pioneering beyond conventional approaches, this study conceptualizes gamification not merely as a motivational tool but as a culture-shifting paradigm that fosters active learning, critical thinking, and collaborative inquiry. The session presents practical gamified interventions designed to boost student engagement, enhance research output, and develop a robust research mindset—skills essential for aspiring academics, innovators, and entrepreneurs. This presentation offers educators a blueprint for integrating gamified strategies into their pedagogical practices, transforming the research experience from daunting to dynamic. By harnessing the power of play, the research aims to empower educators to lead a paradigm shift in undergraduate research motivation, fostering resilient, curious, and motivated scholars prepared to thrive in complex academic and professional landscapes.

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## Day Two - Sean Stein Pavilion & Office Depot Complex

2:10 to 2:30PM | Mini Presentations (20 minutes)

### Teaching Cybersecurity and AI Across Borders: From Foundations to Ethics

**George Antoniou, PhD**

Lynn University

Room #  
OD  
102

This presentation examines how interdisciplinary course design in AI and cybersecurity can expand undergraduate research while directly supporting career readiness. At Lynn University, the Foundations of Cybersecurity & AI course was updated to serve as the entry point for both Cybersecurity and Data Analytics majors. The course integrates case studies, digital forensics and cloud security labs, and applied exercises with AI-enabled defense-in-depth strategies. Students build core technical competencies while engaging in course-based research that mirrors industry practice. As part of a Fulbright grant, a complementary course, AI & Ethics, was developed for the University of Tirana. Proposed as a mandatory course across disciplines, it introduces students to Python programming, AI tools, and ethical frameworks for technology use. Its design positions AI and ethics as a new form of digital literacy essential for all fields of study. Together, these courses demonstrate how cross-institutional collaboration, course-based initiatives, and interdisciplinary frameworks can embed authentic research opportunities, ethical inquiry, and career-focused skills into undergraduate learning. The session will share strategies for adapting this model across institutions, showing how U.S. and European experiences can inform sustainable pathways that prepare students to navigate the evolving challenges of AI and cybersecurity.

### Early Immersion in Research: A Framework for Supporting First-Year and Transfer Student Success

**Lauren Gapczynski, MS & Jennie Soberon, MBA**

Florida Atlantic University

Room #  
OD  
102

Early engagement in undergraduate research has been consistently linked to improved academic performance, increased retention, and enhanced post-graduate outcomes. At Florida Atlantic University, we have established a comprehensive plan that includes curricular and co-curricular strategies to increase undergraduate research awareness and engagement of lower division students along with AA/AS transfers. Examples of high-impact early engagement strategies that will be discussed include co-curricular support of faculty for mentoring lower division and AA/AS transfer students, and supporting curricular initiatives, including offering cohort-based introduction to research courses for these same groups and expanding our summer fellowships program. By highlighting these high-impact practices and sharing assessment data and lessons learned, this session will offer a replicable framework for institutions seeking to improve access to undergraduate research.



## Day Two - Sean Stein Pavilion & Office Depot Complex

Designing Inclusive Summer Research Opportunities: A Model from UCF's SURF Program  
*Tasnim Mellouli, BS*  
University of Central Florida

Room #  
OD  
03

■

Summer research offers undergraduate students a valuable opportunity to conduct independent research, develop oral communication skills, and build professional networks. While many summer research programs place students at institutions other than their own, universities can also create impactful programs for their own students. This approach is especially beneficial for students with summer obligations such as work, coursework, family responsibilities, or immigration-related constraints. A funded, on-campus summer research program can help reduce financial barriers and ensure broader access to meaningful research experiences. At the University of Central Florida (UCF), the Office of Undergraduate Research administers the Summer Undergraduate Research Fellowship (SURF) specifically for UCF students. SURF enables participants to engage in faculty-mentored independent research, attend professional development workshops, and present their findings in a poster session at the end of the summer. Over the past few years, SURF has evolved to better meet student needs by introducing more relevant programming, collecting feedback through surveys, hosting social and orientation events, and utilizing an asynchronous web-based course. This presentation will outline the SURF program model, share best practices for implementing similar initiatives, and present data on the fellowship's impact on student success in undergraduate research.

□ .....



# Places to Eat

## **Park Place** (North of FAU)

**Burton's** (American, gluten-free)

5580 N Military Trl, Boca Raton, FL 33496

🕒 11:30AM to 11PM | 📞 (561) 465-2036

**Olive U Mediterranean Grill** (Mediterranean)

5560 N Military Trl #324, Boca Raton, FL 33496

🕒 11AM to 8:30PM | 📞 (561) 500-0108

## **Town Center Mall at Boca Raton** (SW from FAU, across Glades)

**Vale Healthy Kitchen** (Smoothies, wraps)

5250 Town Center Cir, Boca Raton, FL, 33486

🕒 9AM to 11PM | 📞 (561) 717-4275

**Rocco's Tacos & Tequila Bar** (Mexican)

5250 Town Center Cir, Boca Raton, FL 33486

🕒 11:30AM – 12AM | 📞 (561) 416-2131

**Cvi.Che 105** (Peruvian & Latin, seafood)

5070 Town Center Cir, Boca Raton, FL 33486

🕒 11:30AM to 11PM | 📞 (561) 221-0940

## **University Commons** (S of FAU, across Glades)

**J. Alexander's** (American, seafood)

1400 Glades Rd, Boca Raton, FL, 33431

🕒 11:30AM to 10PM | 📞 (561) 347-9875

**Mario's Osteria** (Italian, pizza)

1400 Glades Rd 210, Boca Raton, FL 33431

🕒 11:30AM to 9PM | 📞 (561) 239-7000

**Shake Shack** (Burgers, milkshakes)

1400 Glades Rd, Boca Raton, FL 33431

🕒 10:30AM to 11PM | 📞 (561) 923-0847

## **Mizner Park** (SE of FAU, across Glades)

**Mister O1** (Pizza, gluten-free)

555 N Federal Hwy Ste 5, Boca Raton, FL 33432

🕒 12PM to 11PM | 📞 (786) 677-2903

**PZZA Boca Raton** (Smash burgers, pizza)

126 NE 2nd St, Boca Raton, FL 33432

🕒 11:30AM to 9PM | 📞 (561) 931-2854

**Ramen Lab Eatery** (Ramen, soup)

100 NE 2nd St, Boca Raton, FL 33432

🕒 2PM to 11:30 PM | 📞 (561) 750-4448

**Max's Grill** (American, comfort food)

404 Plaza Real, Boca Raton, FL 33432

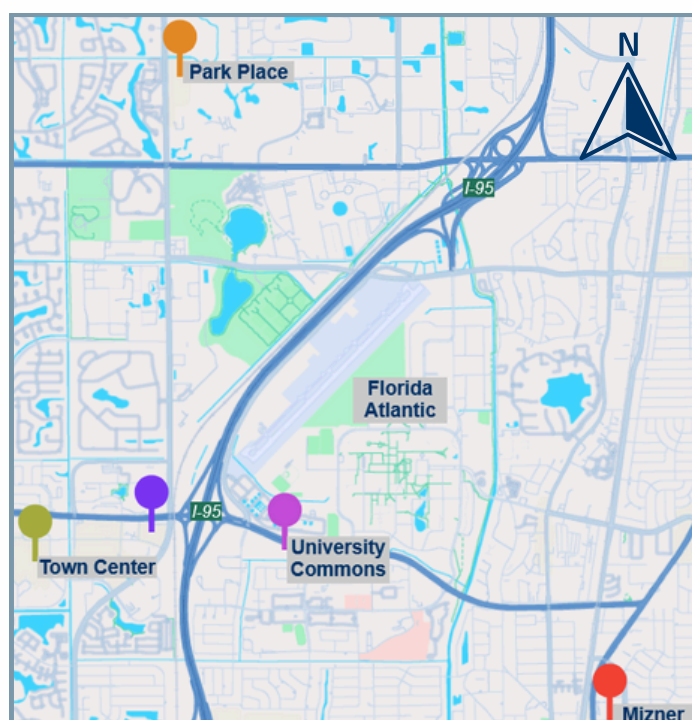
🕒 11:30AM to 10PM | 📞 (561) 368-0080

## **Wyndham Boca Raton**

**Farmer's Table** (American, vegan, homemade)

1901 N Military Trl, Boca Raton, FL 33431

🕒 7:30AM to 10PM | 📞 (561) 417-5836





# The Florida Undergraduate Research Association

FURA is a nonprofit organization dedicated to promoting the understanding of research and creative activity across all disciplines. FURA promotes the creation of new undergraduate research opportunities and unites like-minded faculty and administrators across the state to support this high-impact educational practice.

Currently, 22 institutions across Florida—including public and private universities as well as state colleges—are active members of FURA. This diverse network reflects a shared commitment to advancing undergraduate research statewide.

FURA's mission is to ensure that every undergraduate in Florida has access to meaningful research experiences, empowering students to explore, discover, and contribute across all fields of study.



Learn more:  
[floridaundergradresearch.org](http://floridaundergradresearch.org)

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# Posters at the Capitol

January 26-27, 2026

Florida Undergraduate Research Posters at the Capitol in downtown Tallahassee will be held next during the legislative session of 2026!

Florida Undergraduate Research Posters at the Capitol is an opportunity for 3 students from each FURA Institutional Member to share their dynamic and engaging undergraduate research and connect with Florida representatives. Students learn more about the political process and how to advocate for undergraduate research at the local and state governmental level.

[floridaundergradresearch.org/posters-at-the-capitol-2026](https://floridaundergradresearch.org/posters-at-the-capitol-2026)





# *Thank You*



*With sincere thanks for your participation: we look forward to seeing you again soon*

*See how Undergraduate  
Research makes waves at FAU*

