

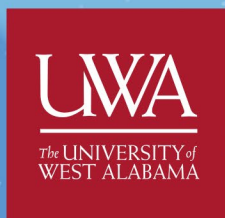


MARCH 11-13, 2025

THE UNIVERSITY OF WEST ALABAMA
LIVINGSTON, ALABAMA

HYBRID (IN-PERSON ON UWA CAMPUS, USA, AND VIRTUALLY)

HOSTED BY



PARTNER INSTITUTIONS





PROGRAM AT A GLANCE

March 11-13, 2025

The UNIVERSITY of
WEST ALABAMA

LIVINGSTON, AL

SCHEDULE

13th Annual Academic Research Conference
March 11-13, 2025
All Time is Central Standard Time

March 11, Virtual Meeting

9:30 am – 9:50 am	<u>Welcome Remarks</u>
10:00 am – 12:00 pm	<u>Business and Economics, Education, Engineering and Computer Science Poster Presentations</u>
10:00 am – 12:00 pm	<u>Health and Medicine Poster Presentations</u>
10:00 am – 12:00 pm	<u>Interdisciplinary and Social Sciences and Humanities Poster Presentations</u>
10:00 am – 12:00 pm	<u>Physical and Life Sciences Poster Presentations</u>
12:00 pm – 1:00 pm	Break
1:00 pm – 3:00 pm	<u>Business and Economics Oral Talk Presentations</u>
1:00 pm – 3:00 pm	<u>Education and Social Sciences and Humanities Oral Talk Presentations</u>
1:00 pm – 3:00 pm	<u>Education Professional Oral Talk Presentations</u>
1:00 pm – 3:00 pm	<u>Engineering and Computer Science and Mathematics Oral Talk Presentations</u>
1:00 pm – 3:00 pm	<u>Health and Medicine Oral Talk Presentations Session 1</u>
1:00 pm – 3:00 pm	<u>Health and Medicine Oral Talk Presentations Session 2</u>
1:00 pm – 3:00 pm	<u>Interdisciplinary Oral Talk Presentations</u>
1:00 pm – 3:00 pm	<u>Physical and Life Sciences Oral Talk Presentations Session 1</u>
1:00 pm – 3:00 pm	<u>Physical and Life Sciences Oral Talk Presentations Session 2</u>
March 31	Announcement of awards for virtual sessions (by email)

SCHEDULE

March 12, In-Person Meeting UWA Campus Livingston, AL Bell Conference Center

8:00 am – 8:30 am	Registration and poster setup
8:30 am – 8:45 am	<u>Welcome Remarks</u>
8:45 am – 9:00 am	<u>Message from Dr. Andrea Mayfield</u>
9:00 am – 9:45 am	<u>Keynote by Rosie Zilinskas</u>
9:45 am	Group Photo
10:00 am – 3:30 pm	Poster Session Competition and Exhibition
12:30 pm – 1:30 pm	Lunch and Networking
1:30 pm – 3:30 pm	Education, Engineering and Computer Science, and Social Sciences and Humanities Oral Talks
1:30 pm – 3:30 pm	Health and Medicine and Physical and Life Sciences Oral Talks
5:30 pm – 5:45 pm	Welcome Remarks
5:45 pm – 6:30 pm	Dinner
6:30 pm – 7:15 pm	<u>Keynote by Neeti Jain</u>
7:15 pm – 7:30 pm	<u>Awards and Closing Remarks</u>

March 13, In-Person The Power of Storyteller Telling UWA Campus Livingston, AL Bell Conference Center

9:00 am – 12:00 pm	Workshop Part I
12:00 pm – 1:00 pm	Lunch and Networking
1:00 pm – 4:00 pm	Workshop Part II

ARC STEERING COMMITTEE



Dr. Mustafa Morsy
The University of
West Alabama



Dr. Melissa Haab
The University of
West Alabama



Danielle Miller
The University of
West Alabama



Dr. Tracy Keener
The University of
West Alabama



Dr. Kaleigh Pate
The University of
West Alabama



Haysley Gillespie
The University of
West Alabama



Chris Theriot
The University of
West Alabama



Dr. Gaungming Cao
Ajman University



Dr. Anouar Alami
Sidi Mohamed Ben
Abdellah University

ARC TASK FORCE MEMBERS

Marketing

Dr. Melissa Haab
Leslie White
Kirstan Cunningham
Cody Ingram
Hannah Millwood

Student Affairs
Student Affairs
Student Affairs
Institutional Advancement
STEM Education

Finance and Fundraising

Chris Theriot
Chris Lucas
Danielle Haley
Dr. Dara Murray
Dr. Andrea Mayfield

Institutional Advancement
Institutional Advancement
Liberal Arts
Nursing
Rural Workforce Development

Program

Dr. Kaleigh Pate
Dr. Amanda Pendergrass
Dr. Datta Narendra
Dr. Ethan Birney
Sidney Freeman

Mathematics
Education
Engineering Technology
History
Biological & Environm Sciences

Logistics

Danielle Miller
Byron Thetford
Troy Maddox
Amanda Gilliland
Zachary Collier

Space and Project Admin.
Student Affairs
Student Affairs
Liberal Arts
Information Technology

Outreach

Dr. Tracy Keener
Gena Robbins
Dr. Marti Herlong
Dr. Brian Keener

Biological & Environm Sciences
Career Services
Psychology/Sociology
Biological & Environm Sciences

SPONSORS



Project Grow, funded by the Kern Family Foundation, focuses on developing school leaders of virtue and provides support to school leadership in developing and implementing a school plan aligned to the character framework to foster human flourishing and rural school transformation in 82 schools in the Black Belt, South Alabama, and East Mississippi regions. Project Grow developed a network, with a membership exceeding 600, forging relationships and connections between the University and school leaders through conversations and professional development. Project Grow's work with faculty to select virtues aligned to education professional dispositions, to provide training on the character framework and to lend support to the College of Education faculty (COE) in revising the curriculum in five programs, weaving character throughout. Project grow's logo reflects the College of Education's values in each petal.

SPONSORS



The National Science Foundation (NSF) awarded \$1.5M in scholarships to The University of West Alabama (UWA). The project will directly benefit undergraduate students throughout the next six years. The project title is **Biology Opportunities and Scholarships for Success II** (BOSS II). Students accepted in the program will receive an annual scholarship of \$8,500, renewable for up to 4 years. The UWA BOSS II scholarship is designed to support students financially and academically to complete their college degree within four years, leading to a career in biological or environmental sciences or joining graduate or professional schools.



The primary purpose of **UWA-Teach** is to increase the number of STEM teachers in Alabama and diversify the teacher workforce. UWA-Teach offers four-year degree plans that fully integrate students' STEM content major requirements and UWA-Teach program requirements and allow students to obtain secondary STEM teaching certification while earning degrees in science, computer science, engineering, or mathematics. UWA-Teach prepares teachers with deep content knowledge and inquiry-based pedagogical strategies. The first two one-hour field-based courses allow students to try out teaching in a positive and supportive environment with no demand for a commitment to continue in the program. UTeach programs produce teachers at a lower cost than other leading programs, and our graduates stay in teaching longer, improve student performance in math and science, and influence students to enter STEM fields.

SPONSORS



CARES
*Center for Achievement, Retention,
and Enrichment Services*

UWA CARES (Center for Achievement, Retention, and Enrichment Services) provides students access to centralized advising, mentoring, tutoring, workshops, open study hall, access to technology, and summer leadership camps. These services are provided free of charge to all students and are designed to assist students in overcoming barriers to achieving their academic goals. CARES uses a student-service-centered approach to provide support services, encourage participation in campus activities, and enrich the students' overall campus experience. UWA CARES is located in Spieth Hall 200 and is funded through a US Department of Education grant.

Alabama Power Company, headquartered in Birmingham, Alabama, is a company in the southern United States that provides electricity service to 1.4 million customers in the southern two-thirds of Alabama. It also operates appliance stores. It is one of four U.S. utilities operated by the Southern Company, one of the nation's largest electricity generators.



*Office of Sponsored Programs,
Research & Outreach*

The **Office of Sponsored Programs and Research** (OSPR) is vital to the UWA campus. Located in Webb Hall, OSPR is a service division assisting faculty, staff, and students seeking external funds through proposal development and aid in managing awarded grants. OSPR is here to facilitate and enhance the grant writing process with experience and oversight. We want to help you do something that matters!

SPONSORS



MESSAGE FROM THE ARC CHAIR

Dear ARC Participants and Guests,

Welcome to the 13th Annual Academic Research Conference (ARC) at the University of West Alabama (UWA). This event reflects hundreds of hours of innovative research, mentorship, and academic achievement.



What began as a small campus gathering has become a thriving international conference featuring presenters from 34 institutions across 12 countries. This remarkable growth reflects UWA's unwavering commitment to fostering student's research excellence. The ARC showcases diverse presentations spanning the sciences, humanities, education, business, and technology—each telling a unique story of curiosity, perseverance, and discovery. I encourage you to attend multiple sessions, engage with presenters, and explore new perspectives throughout the day.

In celebration of Women's History Month, we are honored to welcome two distinguished keynote speakers: Rosie Zilinskas, CEO of *No Women Left Behind* and host of the *Women in Leadership* podcast, who brings over 30 years of corporate leadership experience and will share strategies for career growth, job searches, and confidence-building; and Neeti Jain, strategic partnerships advisor at NYC's Mayor's Office of Food Policy and leader of the *Plant-Powered Carbon Challenge*, who, with degrees from Yale and the University of Chicago, will discuss how professionals can craft compelling narratives to drive change.

We thank our international co-hosts—Ajman University (UAE) and Université Sidi Mohammed Ben Abdellah-Fès (Morocco) for enriching ARC with global perspectives. These collaborations strengthen our international connections and foster innovation across borders.

This conference is made possible by the dedication of our Steering Committee, task forces, moderators, and judges. We also thank UWA and Tombigbee RCD for their generous support.

Whether presenting, mentoring, or attending, your participation strengthens the academic spirit that defines UWA and ARC.

Sincerely,

Dr. Mustafa Morsy
ARC Chair and co-founder

MESSAGE FROM UWA PROVOST

Dear ARC Participants and Guests,
I have been privileged to watch the growth of the Academic Research Conference grow from a small event that within a single academic to a unit to a conference that extends across not only campus but across international borders. As Provost, I am thrilled to see the cross-disciplinary collaboration that ARC encourages at the University of West Alabama.



ARC builds on UWA's commitment to provide hands-on learning opportunities, networking experiences, and personal growth epiphanies in different ways. I know that through this conference, you will witness firsthand the passion, these presenters have for their work. And, you will walk away enriched for the experience.

I encourage you to attend as many sessions as possible, so that you can meet, engage and become part of this wonderful community of learners. I promise they want to share their insights with you and hear what you have to say about their work.

We extend our special thanks to our international cohosts—Ajman University (UAE), Université Sidi Mohammed Ben Abdellah-Fès (Morocco), and HCMC University of Technology and Education (Vietnam)—for enriching ARC with a truly global perspective.

I would be remiss if I did not express my gratitude to the 2025 ARC Steering Committee and their individual tasks forces. While the conference lasts two days, these individuals have worked untold hours bringing everything together so that you might have the best experience possible. In addition, I wish to thank the volunteers who have agreed to serve as session moderators and judges. Their work is also greatly appreciated.

Finally, I wish to thank you for taking the time to be here and joining our academic community. Your dedication and excitement inspires us. We are a stronger and more vibrant institution because of you.

Sincerely,

A handwritten signature in blue ink that reads "Tina Naremore Jones". The signature is fluid and cursive.

Tina Naremore Jones, Ph.D.
Provost

MESSAGE FROM UWA PRESIDENT

Greetings!

On behalf of the University of West Alabama, we thank you for your participation and invaluable contribution to the Academic Research Conference. This event brings together an exceptional array of scholarly interests, showcasing your commitment to your respective fields of study and emphasizing the importance that research in higher education has on our society. No matter the scale of focus, we can be certain that scholarly research has a positive impact on virtually every aspect of life, and it is an incredible honor to witness the development and continuation of your dedication to innovation and achievement.



At UWA, we believe the value of experience gained through a scholarly diverse academic community is immeasurable. We are deeply proud of our own scholars, and we welcome our guests as part of this community through participation in ARC. In seeking to answer questions and offer solutions through research, we exhibit intellect, empathy and collaboration to advance and strengthen all that we do.

It is our pleasure to host this conference as a way of sharing our University community's scholarly achievements and pursuits while welcoming insights, developments, and findings of scholars from around the globe. May we each remain devoted to the scholarly work that we know can profoundly impact our society through discovery.

Sincerely,

A handwritten signature in blue ink, which appears to read "Todd Fritch". The signature is fluid and stylized.

Todd G. Fritch, Ph.D.
UWA President

MESSAGE FROM USMBA PRESIDENT

It is with great pleasure that our university co-organizes this scientific event with renowned universities. I wish a rewarding and fruitful scientific gathering to all participants of the University Research Conference (ARC2025), which will be held from March 11 to 13, 2025, on the University of West Alabama campus in Livingston, as well as virtually.



Our university is heir to the oldest university in the world ("Qaraouine University"). The modern version of the Sidi Mohamed Ben Abdellah University of Fez dates back to 1975. We are located on 3 campuses and have 13 establishments in various disciplines, including humanities, social sciences, engineering, sciences and technology, medical sciences, business and management, and sport. We offer almost 300 study programs covering all disciplines.

Over 100.000 students are enrolled in our institutions, including almost 2.000 international students (from 70 countries), more than 1.700 faculty and research staff in 80 research laboratories, and more than 6.000 doctoral students. Our scientific output is around more than 2600 publications per year.

We are delighted that this conference was also co-organized this year with the University of West Alabama, USA, within the framework of the Memorandum of Understanding between the University Sidi Mohamed Ben Abdellah-Fez and the University of West Alabama-USA, signed in Fez on September 2, 2022, as well as with the University of Ajman-United Arab Emirates. This important collaboration provides our doctoral students an opportunity to share knowledge, exchange innovative ideas, and develop valuable academic relationships.

We look forward to highlighting the notable work of doctoral students and teacher-researchers at Sidi Mohamed Ben Abdellah University. Our sincere thanks to all participants for their commitment and contribution to the development of varied and stimulating research.

I would like to conclude by wishing all participants every success and achievement in their work during this major conference, hoping that it will be part of a lasting dynamic of collaborations and future scientific meetings.

Sincerely,

Mustapha IJJAALI, President
Sidi Mohamed Ben Abdellah University of fez - Morocco

KEYNOTE SPEAKERS

At the heart of the “No Woman Left Behind” initiative is **Rosie Zilinskas**, a beacon of hope and empowerment for women navigating the corporate world. More than just an advocate, Rosie is a Certified High-Performance Coach who pours her passion into transforming the professional lives of women. Her vibrant brand is a treasure trove of resources, featuring the uplifting “No Woman Left Behind” podcast, personalized career-building services, a warm and supportive mentoring community, and insightful consultancy.



Rosie’s nurturing voice also shines in the bestselling book, “Engaging Speakers – Voices of Truth,” where she shares her wisdom and encouragement. Rosie believes wholeheartedly in the transformative power of confidence and a strategically crafted career roadmap. With her empathetic guidance, she helps women navigate and surmount professional challenges. Her engaging bilingual storytelling and educational programs are not just about helping women gain well-deserved recognition in the corporate world; they’re about bridging the gender gap and fostering a more inclusive environment. Her own experiences inform these efforts as an

Executive Vice President at a Fortune 500 insurance company, where she witnessed women’s often-overlooked talents and potential in the workplace. With a rich tapestry of over thirty years in corporate leadership, Rosie brings a depth of understanding and a personal touch to her coaching. Rosie’s mission is deeply personal and far-reaching: she’s not just shaping successful careers. She’s nurturing a more empowered, equitable society and inspiring a generation of women to step into their power and brilliance in the world.

KEYNOTE SPEAKERS

Neeti Jain is an environmental scientist and environmental justice practitioner, currently serving as a Strategic Partnerships Advisor in the New York City Mayor's Office of Food Policy. As an NSF Graduate Research Fellow at the Yale School of the Environment, her work focused on promoting justice-centered storytelling at leading natural history museums and has been featured in museum journals and WNPR. An educator at heart, Neeti is an adjunct faculty member at New York University, in addition to teaching workshops with the Story Collider.



THE POWER OF STORYTELLING WORKSHOP

The Power of Storytelling Workshop

March 13 (9:00 am – 4:00 pm)

The Story Collider will provide an interactive keynote address on March 12, exploring the science of storytelling through communication studies, psychological science, and social neuroscience. Participants will discover why stories matter, what makes narratives compelling, and the physical and mental health benefits of storytelling and story listening. Beyond theoretical knowledge, attendees will gain practical tips for crafting authentic personal narratives designed to entertain, persuade, or inspire audiences.

Building on the keynote foundation, our hands-on workshops guide participants through developing their own science-based personal stories in the style featured on our weekly podcast. These sessions address crucial storytelling questions: How do you identify meaningful stories from your experiences? What universal elements do compelling stories share? How can you integrate scientific concepts accessibly? Participants will practice their narratives, receive expert feedback, and develop confidence as science communicators. These workshops demonstrate how storytelling enhances personal growth and professional development in scientific fields. Two renewed speakers will present the workshop.

Grant Bowen | Producer - New York City

Grant Bowen is an accomplished storyteller featured at prestigious venues, including The Moth, The Story Collider, and numerous NYC storytelling shows. He co-produced the award-winning monthly show “Awkward Teenage Years,” showcasing stories from adolescence. His solo performance, “A Public-Private Prayer,” has been featured in multiple theater festivals across NYC and at Ursinus College in Pennsylvania. Grant’s extensive acting credits include productions with Vital Theatre Company, Infinity Theatre Company, and Theatreworks USA. As a playwright, his full-length work “Late Night Odyssey” received a staged reading at the 2018 Broadway Bound Theatre Festival, while his one-act play “Lay Down My Sword and Shield” was entirely produced by Articulate Theatre Company.



THE POWER OF STORYTELLING WORKSHOP

Jitesh Jaggi | Senior Producer - Chicago

Jitesh Jaggi, an Indian immigrant now based in Chicago, transitioned from finance to storytelling after a pivotal moment involving lost Excel data made him realize his true calling. Now working on a book of essays, Jitesh has established himself as a two-time Moth StorySlam winner and producer for The Story Collider. He coaches both individuals and corporate clients in storytelling techniques. Jitesh approaches his work humorously and can be easily persuaded by books and chocolates.



CONFERENCE CODE OF CONDUCT

In order to establish a productive academic environment, all participants in the Academic Research Conference agree to abide by the following code of conduct.

- 1) In the field of Research and Academic Integrity I shall
 - a) Be accurate in gathering and assessing information.
 - b) Be accurate in formulating conclusions.
 - c) Create presentations both written and oral with a goal of communicating what was learned and what areas of doubt remain.
 - d) Be sure to appropriately credit others for their research and ideas.
- 2) When interacting with other Conference participants, I shall
 - a) Make every reasonable effort to respect my audience's time by
 - i) Sticking to a timeline and
 - ii) Having a thoughtful presentation
 - b) Engage with questions and feedback by accepting them as well-intentioned attempts to further knowledge.
 - c) Offer full attention when attending presentations.
 - d) Ask questions and offer feedback in a way designed to promote growth by the speaker and other audience members.
- 3) In general, I shall follow the policies of the ARC and follow all relevant laws.

Violations of this Code of Conduct may result in consequences including, but not limited to:

- 1) Formal warnings
- 2) Removal from conference sessions
- 3) Revocation of participation privileges in future ARC events
- 4) Reporting serious violations to relevant institutions or authorities



March 11, 2025 Virtual Event



ALL TIMES ARE IN US CENTRAL STANDARD TIME

9:30 am – 9:50 am	Opening, Welcome Remarks, and Instruction	Zoom link
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Abstracts

*Undergraduate Presentations

**Graduate Presentations

Abstract no.	Speaker's Name	Abstract Title
10:00 am – 12:00 pm		BUSINESS AND ECONOMICS, EDUCATION, ENGINEERING AND COMPUTER SCIENCE, PHYSICAL AND LIFE SCIENCE POSTERS
Zoom Link		
Moderators: Tracy Keener and Gena Robbins		
1	Basel Semsam	*Multi-Frequency Exciter Instrument for Diabetic Neuropathy Assessment (Dia-Sens)
2	Najoua Khayati	Empowering rural women through the promotion of entrepreneurship
3	Imad El Mallahi	Stacking Method for Accurate Prediction of Traffic Accident Severity Using Machine Learning Models
4	Monika Działkowska	Flow cytometric and microscopic evaluation of apple (Malus domestica) seedlings from interploidy crosses
5	Younas Aouine	Synthesis and Characterization of new N-tosylated Tri-(1,2,3-Triazole) Derivatives via the Copper-Free Huisgen Cycloaddition
6	Youssef Laaouaj	Nature-inspired MPPT algorithms for solar PV
7	Imane Mrabti	Surveillance and identification as key elements for the management and protection of citrus trees against "Protopulvinaria pyrifomis" (Cockerell, 1894) (Hemiptera: Coccidae)
10:00 am – 12:00 pm		HEALTH AND MEDICINE POSTERS
Zoom Link		
Moderators: Chris Theriot and Nancy Brooker		
8	Mohammed Khalifah	*Unlocking the Power of Green Algae Metabolites: A Breakthrough in Analysis and Future Innovations
9	Fathima Valayath	*Effective Medical Multiple Choice Question (MCQ) Design: Best Practices and New Approaches in generating MCQs
10	Fatima Ez-Zahra Aabassi	*Eucalyptus Camaldulensis Essential Oils through Hybridization and Rectification: A Chemometric Study
11	Aziz Arzine	*New Isoxazole Derivatives: Design, Synthesis, Crystal Structure, Antimicrobial Assessments
12	Nawal Elomari	A Cross-Sectional Observational Study on Quality-of-Life Assessment in Elderly Patients with Diabetes:

Abstract no.	Speaker's Name	Abstract Title
		Evaluating Quality of Life and Exploring Contributing Factors, in Meknes, Morocco
13	Fatima Zahra	Quality of Life of People Living with HIV in Morocco: Insights from the Meknes Region
14	Hanane Lemmih	Comparative study of quality of life between breast cancer survivors and breast cancer patients undergoing radiotherapy in Morocco
15	Yassine Koubi	A Computational Study of Di-Substituted 1,2,3-Triazole Derivatives as Potential Mycobacterium Tuberculosis Drug Candidates. 3D-QSAR, Molecular Docking, Molecular Dynamics, and ADMETox
10:00 am – 12:00 pm		INTERDISCIPLINARY AND SOCIAL SCIENCES AND HUMANITIES POSTERS
<u>Zoom Link</u>		
Moderators: Melissa Haab and Chandler Findley		
16	Simranjeet Singh	Enhanced Electrochemical Performance in Cr (VI) Sensing using $Ti_3C_2T_x/PANI$ Structure Enabled by PANI Interlayer
17	Ghizlan En-Nabety	Mixed-anion Compounds as Cathode Materials for Na-Ion Batteries
18	Khadija Manhou	Impact of Saline Irrigation Water on Durum Wheat (cv. Faraj) Growth on Sandy and Clay Soils
19	Mouna Aouine	Evaluation of Dry Chemo-Mechanical Pretreatments of Chickpea Straw for Enhanced Reducing Sugar Release in Bioethanol Production
20	Azzeddine Bechar	Antimicrobial Activity of Electrospun Polylactic Acid-Based Nanocomposite Films Enhanced with Silver Nanoparticles
21	Houda Serrar	Synthesis and Biological Evaluation of Pyrazole-Derived Heterocyclic Compounds from Cyanoester Epoxides
22	Belkacemi Siham	Impact of Composting on Waste Management and the Quality of Vegetables: The Case of Red Beet in Morocco
23	Safae Sedjari	Near and Far Transfer of Working Memory Training in Autism Spectrum
10:00 am – 12:00 pm		PHYSICAL AND LIFE SCIENCE POSTERS
<u>Zoom Link</u>		
Moderators: Marti Herlong and Mark Davis		
24	Fatima Zehra	*Pretreatment-Enhanced Microbial Electrolysis of Shrimp Waste: A Strategy for Simultaneous Energy and high-value product Recovery
25	Sophia Marshall-Pelayo	*Enhancing Resistant Starch Content of Pea Starch Through Complexation with Gallic Acid and Alkyl Gallates
26	Manal El Loulidi	*Renewable Energy
27	Fathalah Elwahab	*Agronomic and Genetic Diversity of Moroccan Rice Varieties and Their Resistance to Blast Disease (<i>Pyricularia oryzae</i>)

Abstract no.	Speaker's Name	Abstract Title
28	Khadija El Gadali	Novel 2-quinolone-triazole- α -aminophosphonate hybrids as potential yellow fever virus inhibitors
29	Simranjeet Singh	Statistical optimisation, genotoxicity & kinetic studies for improved Atrazine degradation by three novel isolates
30	Asmae Ben Abdelhadi	RbCu(HCO ₂) ₂ Cl: Synthesis, crystal structure, thermal properties and magnetism of a novel hybrid organic-inorganic Cu formate-based framework
31	Hajar Elmrayej	Synthesis, Structural Analysis, Corrosion Inhibition Efficiency, of 2-methyl-[1,2,4] triazolo[1,5-a] pyrimidin-6-ol: Insights from Experimental and Computational Studies
32	Ghita Benkirane	Evaluation of a spray-dried bacteriocin produced by <i>Enterococcus durans</i> F21 as a bio-preservative in various food matrices
33	Hayat Benzahra	Biological Control of <i>Penicillium Digitatum</i> and <i>Penicillium Italicum</i> on Postharvest citrus fruits
1:00 pm – 3:00 pm		BUSINESS AND ECONOMICS ORAL TALKS
Zoom Link		
Moderators: Chris Theriot		
34	Barkani Wafae	*Individual capacity to change: The mediating role of psychological capital in individual changing process to sustain performance
35	Yousef Elgaabry	*Little Tots Academy
36	Ahmad Abdulla	**Why Emiraty People Tend to Buy Luxury Goods, Is it Because They Think Sustainability? Or Just Because They Can Afford it
37	Najoua Khayati	**Transitioning from Inequalities: The Role of agricultural entrepreneurship in rural development
38	Salma Naselhaj	**Beyond traditional governance: How CEO traits and cognitive biases shape decision-making and firm performance
39	Fatima Zahra Bertat	**Psychic Distance in the Uppsala Model: Determinant of Moroccan Insurers Internationalization
40	Oumayma Khouja	**Value Creation in the Age of Artificial Intelligence (AI): A Systematic Literature Review
41	Ahmed Meliani	**Green Marketing, Brand Loyalty, and eWOM: Evaluating Corporate Social Responsibility Mediating Role within the Theory of Planned Behavior
42	Youssef Boujellaba	Social Protection as a Catalyst for Sustainable and Inclusive Growth: The Case of Morocco
1:00 pm – 3:00 pm		EDUCATION AND SOCIAL SCIENCES AND HUMANITIES ORAL TALKS
Zoom Link		
Moderators: Kendrick Prewitt and Melissa Haab		
43	Mehdi Belghmi	**Cyberbullying Among Students of BA English Studies: the Moroccan Context as a Case Study

Abstract no.	Speaker's Name	Abstract Title
44	Youness Rakibi	**Virtual Classroom Management in Life and Earth Sciences: Practices and Challenges of Secondary School Teachers in the Marrakech-Safi Region
45	Aiza Maqbool	**Optimizing Photocatalysis for Sustainable Pollution Remediation
46	Insaf Khoudri	**The Impact of Dialogic Approach on ESP University Students' Speaking Anxiety and Emotional Wellbeing
47	Ahmed Lehfid	**Between Tradition and Modernity: Exploring Moroccan Women's Attitudes Towards Abortion
48	Elhoucine Boualili	**Exploring ELT Practitioners' Attitudes towards the digitization of EFL Practices: What Impact on Soft Skills?
49	Oussama Moussaoui	Arab Digital Medial and National Security
50	Nato Akhalaia	Towards ergative construction in Kartvelian languages
1:00 pm – 3:00 pm		EDUCATION PROFESSIONAL ORAL TALKS

[Zoom Link](#)

Moderators: Gena Robbins and Chandler Findley

51	Elhassane El Hilali	Students' Perspectives on E-Learning as an Instructional Method during the Covid-19 Pandemic at Moroccan Universities
52	Abdelali Staoui	A theoretical strategy to enhance the functionality of hole transport materials for effective perovskite solar cells based on thiophene and TPA derivatives
53	Mimoun Es-Salmi	Executive Functions and Difficulties in Learning Mathematics Among Sixth-Grade Elementary Students
54	Najib Bouhout	Teacher leadership and student satisfaction: A full latent growth approach to moderated mediation using soft skills and motivation
55	Youssef Laaraj	Moroccan Language Policy and the Status of the English Language in Higher Education
56	Mohamed Suiyhi	Intrinsic motivation: A key factor for academic and clinical success among nursing students
57	Akdim Mariam	Hybrid approach in didactics and leadership development of high school students: case in a rural environment in the Draa Tafilalet region (Morocco)
58	Itto Mellouki	Study of Pragmatemes: From Linguistic Description to Didactic Application
59	Abdelali Mardy	A comparative study of the educational effectiveness using linear and interactive videos in teaching chemistry at secondary school

Abstract no.	Speaker's Name	Abstract Title
1:00 pm – 3:00 pm		ENGINEERING AND COMPUTER SCIENCE AND MATHEMATICS ORAL TALKS
Zoom Link		
Moderator: Andrea Mayfield		
60	Lamia Seddati	*Controllability of Financial Dynamic Systems by Neural Networks
61	Fatima-Zahrae Lakhli	*K-Means Algorithms And Industrial Predictive Maintenance Strategy: Proposal Of A Conceptual Research Model To Transform Industry 4.0 In Morocco
62	Jawad Boutarfass	**Approximation of functional inequalities in quasi-Banach spaces
63	Baha Eddine Harroussi	**Urban expansion and development of high value-added industries: localization of small and medium enterprises operating in information technology in the city of Rabat "proposal for a measurement scale based on structural equation models"
64	Khadija Moutassim	Enhancing Security in Intelligent Transportation Systems: AI-Powered CNN Model for Multi-Class Intrusion Detection in VANETs
65	Mohammed Zouiten	Machine Learning and Artificial Intelligence in Biology: Novel Approaches to Medical Image Analysis
66	Chaimae Ouchicha	A Novel Method for Accurate Medical Image Segmentation
67	Kareem T. Elgindy	High-Accuracy Pseudospectral Methods for Fractional Differential Equations and Optimal Control: New Approaches for Complex Systems
1:00 pm – 3:00 pm		HEALTH AND MEDICINE ORAL TALKS SESSION 1
Zoom Link		
Moderator: Tracy Keener and Kim Giles		
68	Yassine Rhazi	*New Quinazolinone-Triazole Hybrids: Synthesis, Characterization, and Vasorelaxant Properties
69	Muhammad Farhan	*Advancing Breast Cancer Immunotherapy: The Role of Hydrogels in Enhancing Therapeutic Precision and Efficacy
70	Hamid Chamlal	*Mediterranean Diet Adherence Score, Nutritional Profile and Incidence of Gestational Diabetes in Pregnant Women From the Province of Safi (Morocco)
71	Zaid Abu El-Ata	*Cybersecurity Post-Covid and the Threat to Healthcare Data: A Disaster Without Control
72	Maryam Bourhis	*Cytokine and Chemokine Profiling in COVID-19: Immune Signatures Associated with Disease Severity
73	Bouchra Lourhlam	**Syzygium aromaticum hydro alcoholic extract causes anticancer effects in DBA2 mice
74	Bouzammit Rachid	**Novel Triazole-Isoxazole Hybrids As Antibacterial Agents: Design, Synthesis, Characterization

Abstract no.	Speaker's Name	Abstract Title
75	Khawla El Fizazi	**Genetic analysis in complex hereditary diseases: improving diagnosis and management
76	Sara El Mazini	**The study of the genomic diversity of <i>Leishmania infantum</i> in Morocco
77	Sara Zarougui	**Conception of inhibitors by 3D computer modeling targeting the breast cancer
1:00 pm – 3:00 pm		HEALTH AND MEDICINE ORAL TALKS SESSION 2
Zoom Link		
Moderators: Kaleigh Pate		
78	Anouar El Ghazal	Highly Absorbent 3D-Printed Hydrogel with Phytotherapeutic Properties for Wound Healing Applications
79	Salma Latique	Harnessing Algae: A Multifaceted Approach to Sustainable Solutions in Environment, Agriculture, and Health
80	Aziz Arzine	Isoxazole Compounds: Synthetic Strategies, Structural Characterization, and Evaluation of Their Antibacterial Potential
81	Farah Lachquer	Selective Direct Oxidation of 1-Butanol Into Acetal Using H ₂ O ₂ and Cs ₅ MPW11(H ₂ O) ₃ (M=Fe, Co, Cu) Catalysts
82	Oumaima Abouyaala	The anxiolytic, anti-depressive, and antioxidative effects of Lemon verbena in rat rendered diabetic by Streptozotocin injection
83	Farah Lachquer	Direct acetalization of 1-butanol in the presence of H ₂ O ₂ and nanostructured Keggin heteropolysalts catalysts
84	Rachid Haloui	Discovery of new anticancer agents targeting the LSD1 enzyme using a computer-aided drug design approach
85	Meryem Essaidi	Women's wishes and needs in terms of knowledge about sexuality and fertility in relation to female cancers: a review of the literature
1:00 pm – 3:00 pm		INTERDISCIPLINARY ORAL TALKS
Zoom Link		
Moderator: Sidney Freeman		
86	Ghizlan En-Nabety	**Electrochemical analyses pertaining to elevated voltage cathode materials utilized in sodium ion battery systems
87	Chayma Houmami	**Charting the Evolution from Multichannel to Omnichannel Banking: A Bibliometric Analysis and Future Directions in Digital Banking Technologies
88	Simranjeet Singh	**Enhanced Electrochemical Performance in Cr (VI) Sensing using Ti ₃ C ₂ T _x /PANI Structure Enabled by PANI Interlayer
89	Khaoula Sebbar	**Antimicrobial and Antioxidant 3d-Printed Wound Dressings: Engineering Bioactive Scaffolds with Pomegranate Peel Powder and Essential Oils for Enhanced Healing and Infection Control
90	Hajar Zerriq	**Optimizing the performance of photovoltaic systems using the Artificial Bee Colony (ABC) Algorithm

Abstract no.	Speaker's Name	Abstract Title
91	Chaymae Hmimen	DFT-Guided Design of MgZnAl-LTH/Activated Carbon Composites for Efficient Dual Dye Removal in Wastewater Treatment
92	Houda Serrar	Synthesis, Characterization, and Biological Evaluation of Alkyl Thiazole Derivatives: Reactivity Studies and Assessment of Antimicrobial and Antioxidant Activities
93	Mohamed Ali EL-Omairi	Integrated Remote Sensing and Geophysical Approaches for Enhanced Detection of Copper, Iron, and Manganese Anomalies in Southern Morocco
94	Soukaina El Bourachdi	Unleashing the Full Potential of Chitosan@EDTA Beads for High-Performance Cu ²⁺ Ion Adsorption: A Comprehensive Fusion of Experimental Mechanisms, Response Surface Optimization, and Advanced Theoretical Modeling
1:00 pm – 3:00 pm		PHYSICAL AND LIFE SCIENCES ORAL TALKS SESSION 1
Zoom Link		
Moderators: Ethan Birney and Rob Riser		
95	Rachid Bagoun	*Enhancing Energy Efficiency in Phosphoric Acid Concentration: Analyzing the Impact of Parameters in Microwave Technology
96	Hajar Elmrayej	**Corrosion Inhibition of Mild Steel in Hydrochloric Acid Solution by Benzimidazole: Experimental and Theoretical Studies
97	Imane Maiouet	**Technological and Antimicrobial Properties of Isolated Lactic Acid Bacteria Strains with Antagonistic Activity Against <i>Listeria Monocytogenes</i>
98	Warda Waseem	**Comparative Study of Titanate-Based Perovskite Oxides for Energy Storage Devices
99	Asmae Ben Abdelhadi	**(DPA)2MnBr4: an environmentally friendly organic-inorganic hybrid metal halide perovskite with highly efficient green emission and high performance for green down-converted LEDs
100	Alisha Ijaz	**Parametric optimization of catalytic deconstruction of plastic waste using Al ₂ O ₃ supported NiO, CuO, ZnO catalysts
101	Hamza Bellouk	**Sequential Treatment of Young Landfill Leachate Using Aeration and UV/US/Activated Persulfate-Hydrogen Peroxide: Performance Assessment, Optimization, and Phytotoxicity Analysis
102	Widad Tbatou	**Antioxidant, Analgesic, and Wound-Healing Effects of Pine Needles: A Natural Approach to Pain and Oxidative Stress Management
103	Asma Id Babou	**Anthropogenic Factors Affecting the Siltation of the Tildi hill dam in Morocco

Abstract no.	Speaker's Name	Abstract Title
1:00 pm – 3:00 pm		PHYSICAL AND LIFE SCIENCES ORAL TALKS SESSION 2
Zoom Link		
Moderators: Kirstan Cunningham and Anouar Alami		
104	Fatima Zehra Ben Tarraf	Pretreatment-Enhanced Microbial Electrolysis of Shrimp Waste: A Strategy for Simultaneous Energy and high-value product Recovery
105	Hayat Benzahra	Biological Control of <i>Penicillium Digitatum</i> And <i>Penicillium Italicum</i> on Postharvest citrus fruits
106	Cankui Zhang	The Crucial Roles of Phloem Companion Cells in Response to Phosphorus Deficiency
107	Imane Mrabti	Comparative Study of Ten DNA Extraction Methods for Three major scale insects infecting citrus trees in Morocco
108	Lingyan Kong	Research Activities and Opportunities in Food and Nutrition Sciences at The University of Alabama



March 12, 2025 In-Person Event



ALL TIMES ARE US CENTRAL STANDARD TIME

*Undergraduate Presentations

**Graduate Presentations

Abstract no.	Speaker's Name	Abstract Title
10:00 am – 12:30 pm		In-Person Poster Competition
109	Yire Seo	**ASGC Programs and Students' Hands-On STEAM Education
110	Christian Colato	*Graphene Remediation of Diethyl Phthalate (DEP): A Comparison
111	Christian Colato	*Classical Conditioning With A Natural Stimulant In <i>Anolis carolinensis</i> (Green Anole)
112	Ryan Williams	*Identifying and Characterizing Freshwater Microbes Affected By Agricultural Runoff
113	Ryan Williams	*Determining The Presence of <i>Staphylococcus aureus</i> on Athletes' Skin
114	Muhammad Farhan	*Optimizing Nasopharyngeal Cancer Treatment: A Dosimetric Comparison of VMAT and IMRT
115	Leah Stewart	*Analysis of Oral Health of Students at the University of West Alabama
116	Leah Stewart	*Identification and Analysis of Oral Bacterial Isolates via Culturomics Approach
117	Christian Grayson	*A Comparative Analysis of Uterine Cancer Incidence in African American and White Populations in the U.S., with Emphasis on the Top Ten States with the Largest Black Populations
118	Emily Gulley	*Racial disparities in colorectal cancer across various U.S. states, with a particular focus on African American and White men and women
119	Jakayla Rankin	*A Comparative Study of Ovarian Cancer Incidence Between African American and White Populations in the U.S., Focusing on the Ten States with the Highest Black Populations
120	Faith Onomeh	*Comprehensive Examination of Disparities in Prostate Cancer Incidences by Race, and Age Over 65 Years in Alabama's Black Belt Counties, USA
121	Dior Wilson	*Improving Meat Shelf Stability Using Modified Electrolyzed Water
122	Shauncey Hill	The Future of Research at the University of West Alabama
123	Bryson Rhodes	*Endophytic Fungi as Natural Growth Promoters: Identifying Novel Plant-Fungal Symbioses for Sustainable Crop Enhancement
124	Eunji Lee	*The Bioremediation of PFOS by Green Microalgae
125	Kristyn Scarbrough	*The Susceptibility of <i>Streptococcus Mutans</i> in Dental Caries and the Utilization of Oral Health Practices
126	Robert Lewis	*The effects of restraint stress on correlations of testosterone and corticosterone levels with degree and latency to body color alterations in male <i>Anolis carolinensis</i>

*Undergraduate Presentations

**Graduate Presentations

Abstract no.	Speaker's Name	Abstract Title
127	Augusta Arnold	*Repeated agonistic interactions with reflective opponent in male <i>Anolis carolinensis</i> (green anole)
128	Elijah Sharp	*A Comprehensive Study on Congenital Cataracts: Public Perception, Survey Findings, and Literature Insights
129	Julie Payne	*Characterization and optimization of homemade electrolyzed water for safeguarding produce safety and quality
130	Molly Sullivan	*Pea Starch-Fatty Acid Inclusion Complexes: Fabrication, Characterization, and Digestibility
131	Aaron Baker	*Testing Mosquitos For Viral RNA
132	Sudheendra CH.V.K.	**Prevalence and Characterization of <i>Vagococcus lutrae</i> in Seafood
133	Babita Bastakoti	**Silicon Nanoparticles: A Novel Solution for Plant Resilience Under Abiotic Stresses Induced by Climate Change
134	Bhawana Khanal	**Zeolite-Based Nitrogen Nano-fertilizers: A Climate-Smart Alternative
135	Raju Ahmmed	**Impact of Ultrasound-Assisted Freeze-Drying on Carrot's Nutritional Value, Beta-Carotene, Bioactive Compounds, and Microstructure
136	Maddie Jackson	**Disentangling the neural mechanisms of migration from reproduction in White-crowned Sparrows (<i>Zonotrichia leucophrys</i>)
137	Mariam Dauda	**Nanoparticles based techniques in Aflatoxin B1 Detection: A Response to Climate-Driven Food Safety Concern
138	Emily Jones	**Interspecies dyad interactions of native lizard Green anole (<i>Anolis carolinensis</i>) and invasive Brown anole (<i>Anolis sagrei</i>): Behavioral and physiological observations in a controlled laboratory setting
139	Davis Dear	**A Spotlight on Alabama's 31 Endemic Vascular Plant Species Through Botanical Illustration
140	Brooke Turberville	**Vascular Flora Inventory of the UWA Cahaba Biodiversity Center in Central Alabama
141	Alexander Kofman	<i>Cis</i> -acting Regulatory Elements and Nucleotide Content
142	Trinity Crenshaw	*Shaping her Story: Queen Emma & The Encomium
1:30 pm – 3:30 pm		In-Person Oral Talk Session 1 (Bell Conference)
Zoom Link		
Moderator: Kaleigh Pate		
143	El Guennouni Mohammed	Towards Professionalization of Teachers and AI Integration in Teacher Education AI-TPACK to pedagogically integrate artificial intelligent (AI)-based tools into education
144	Claudia Scholz	Research Experiences for Undergraduates
145	Jun Wang	Electrospinning Active Packaging of Cold-fresh Pork based on Zein and Theaflavin

*Undergraduate Presentations

**Graduate Presentations

Abstract no.	Speaker's Name	Abstract Title
146	Songnan Li	Development of an Anthocyanin-Based Intelligent Tag for Visual Monitoring of Salmon Freshness
147	Pravin Shinde	Brief Overview of Analytical Chemistry Instrumentation: Techniques and Applications
148	Alexander Kofman	Asymmetric Distribution of microRNA Target Sites within 3'UTR: Implications for Evolutionary Genomics and Bench to Bedside Research

149	Wassila Benkirane	Revolutionizing Cancer Supportive Care: Evidence-Based Impact of Integrated Support Services on Patient Quality of Life - The Dar Zhor Model from Morocco (2024-2025)
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1:30 pm – 3:30 pm	In-Person Oral Talk Session 2 (Brock Hall)
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<u>Zoom Link</u>

Moderator: Tracy Keener

150	Suleiman Umar Jah	**The relationship between body mass index and dysmenorrhea among adolescent female student at School of Nursing and Midwifery
151	Leah Stewart	*Identification and Analysis of Oral Bacterial Isolates via Culturomics Approach
152	Taylor Underwood	**Preliminary Results of Acoustic Surveys at the Cahaba Biodiversity Center in Bibb County, Alabama
153	Leah Johnson	**FT-IR and DOSY NMR for Poly(γ -benzyl-L-glutamate) at Low Molecular Weight
154	Camille Thompson	**Understanding the role of dark septate endophytes in salinity tolerance and pathogen protection of <i>Spartina alterniflora</i>
155	Kevin Pham	**Physiological and morphological traits vary in their response to recovery after exposure to constant light in the zebra finch

5:30 pm – 7:30 pm	Bell Conference
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<u>Zoom Link</u>

Keynote and Award Ceremony

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Elfadil Abdalla	Ajman	Marti Herlong	UWA
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Ibrahim Ahmed	Ajman	LuJuan Hutchinson	UWA
Anouar Alami	USMBA	Mohamed Ishak	Ajman
Alaa Amiry	Ajman	Tracy Keener	UWA
Ethan Birney	UWA	Naglaa Mahoud	Ajman
Nancy Brooker	UWA	Andrea Mayfield	UWA
Marsha Cannon	UWA	Heather McDonald	UWA
Catalina Casaru	UWA	Rajesh Mohnot	Ajman
Jiawei Chen	UWA	Mustafa Morsy	UWA
Blake Cleckler	UWA	Datta Narrendra	UWA
Kirstan Cunningham	UWA	Kaleigh Pate	UWA
Mark Davis	UWA	Adrian Popan	UWA
Russ Davis	UWA	Kendrick Prewitt	UWA
Chandler Findley	UWA	Andy Rindsberg	UWA
Sidney Freeman	UWA	Rob Riser	UWA
James Gilbert	UWA	Gena Robbins	UWA
Ahmed Godat	Ajman	Frank Rogers	UWA
Melissa Haab	UWA	Muna Salameh	Ajman
Jennifer Harwell	UWA	Natasha Satcher	UWA
Hoda Hassan	UWA	Chris Theriot	UWA

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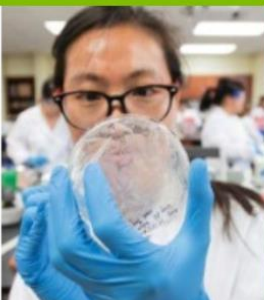
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