13th Annual ACMAP Conference Scientific Program October 3 - 6, 2024 Times are in Central Standard Time

(CST)

Day 1: October 3, 2024 (Thursday)

Prairie View A&M University

Registration and plenary talk: Willie A. Tempton Memorial Student Center (MSC), Opal Johnson Smith Auditorium

Reception: MSC Ballroom

Shuttle vans will run every 10-15 minutes from the Best Western (Waller) hotel to the university between 3:30 pm and 5 pm. Return from the university to the hotels will be between 7:30 pm and 8:30 pm.

Parking Lot 91 - reserved spaces for ACMAP (see map on the last page)

2:00 PM - 6:00 PM		Registration
4:30 PM – 5:00 PM	Welcome	Conference Program Co-Chairs: Aruna Weerasooriya, Ph.D. Prairie View A&M University Diana Roopchand, Ph.D., Rutgers University Vice President, Research & Innovation, Prairie View A&M University: Magesh Rajan, Ph.D. Dean, College of Agriculture Food & Natural Resources, Prairie View A&M University: Gerard D'Souza, Ph.D. Executive Director ACMAP: Fabricio Medina-Bolivar, Ph.D., Arkansas State University President ACMAP: Nirmal Joshee, Ph.D., Fort Valley State University
5:00 PM – 6:00 PM	Plenary	O1. Bhimu Patil, Ph.D. Texas A&M University, USA "Climate resilience and its influence on bioactive compounds in fruits and vegetables: Implications for health and gut microbiota"

6:15 PM – 7:30 PM	Reception	Reception
7:30 PM – 8:00 PM	Meeting	ACMAP Board Meeting

Day 2: October 4, 2024 (Friday)

Prairie View A&M University

Registration and sessions I-IV: Cooperative Extension Program (CEP) Building Auditorium

Lunch: Outside CEP (Tent)

Poster session: CEP

Shuttle vans will run every 10-15 minutes from the assigned Best Western hotel to the university between 7:30 am and 8:30 am. Return from the university to the hotels will be between 6:30 pm and 7:30 pm.

Parking Lot 14 - reserved spaces for ACMAP (see map on the last page)

7:45 AM – 8:15 AM	Registration	
	Session I	Ethnobotany and Bioprospecting
	Chair	Nirmal Joshee Fort Valley State University, USA
	Co-chair	Surendra Surujdeo-Maharaj Prairie View A&M University, USA
8:15 AM – 8:45 AM	Keynote	O2. Seethapathy G Saroja Fort Valley State University, USA
		"Ethnobotany of dioecious species and future perspectives in bioprospecting"

8:45 AM – 9:05 AM	Invited I	O3. Emma Browning Robins Air Force Base, USA "Conserving the proposed federally threatened Ocmulgee skullcap (Scutellaria ocmulgee) on Robins Air Force Base, Georgia"
9:05 AM – 9:25 AM	Invited II	O4. Joshua Kellogg Penn State University, USA "A double-edged sword? Participatory research into traditional plant benefits and toxicity"

		,
9:25 AM –9:40 AM	Oral I	O5. Nurya Abdurhman Birhanu Wollo University, ETHIOPIA "Ethnobotany and DNA barcoding of medicinal and cosmetic plants in Kalu and Bati Districts of Amhara Region, Ethiopia"
9:40 AM–9:55 AM	Oral II	O6-A. K. P. N. G. Kanuwana Gampaha Wickramarachchi University of Indigenous Medicine, SRI LANKA "Heritage of healing, use of medicinal plants in treating envenoming- case of villages in the dry zone tank cascade systems in Sri Lanka with reference to "Bellankadawala" cascade?
9:55 AM-10:10 AM	Oral III	O6-B. Bipul K Biswas Fort Valley State University, USA "Neem and turmeric, two incredible medicinally active plants, an overview of many known and rarely known information to help the community"
10:10 AM-10:30 AM		Coffee Break
	Session II	Chemistry of Medical Plants
	Chair	Joshua Kellogg Penn State University, USA
10:30 AM–11:00 AM	Keynote	O7.Kevin Tidgewell University of Kentucky, USA "Investigation of the secondary metabolites of Cameroonian plants used as antinociceptives"
11:00 AM–11:20 AM	Invited I	O8. Khumoekae Richard Wister Institute, USA "Potent HIV-1 latency reversal by an African medicinal plant extract, <i>Croton megalobotrys</i> , in primary cells from people living with HIV and humanized mice"
11:20 AM–11:40 AM	Invited II	O9. Melanie Rodriguez University of Texas Southwestern Medical Center, USA "Steroid based synthesis of a dual-PROTAC targeting oncogenic and resistance drivers in metastatic castration resistant prostate cancer (mCRPC)"

11:40 AM-11:55 AM	Oral I	O10. Edward Okey
		Federal Polytechnic University, NIGERIA
		"Phyto-GCMS analysis on leaves and stems of <i>Triumfetta tomentosa</i> Boj and <i>Triumfetta rhomboidea</i> Jacq."
11:55 AM -12:10 PM	Oral II	O11. Wesley Gray
	orarii	Southern University and A&M College, USA
		"Isolation and purification of antimicrobial activity and RNASeq exploration induced by <i>Cola acuminata</i> "
12:10 PM – 1:10 PM		Lunch
		Workshop: "The Balancing Act: Life, Career, and the Pursuit of Happiness in Science"
		Andrea Doseff, Ph.D. (Michigan State University, USA)) Sepideh Mohammadhosseinpour, Ph.D. (MD Anderson Cancer Center, USA)
		Panelists:
		Andrea Doseff, Ph.D. (Michigan State University)
		Joshua Kellogg, Ph.D. (Penn State University)
	F	abricio Medina-Bolivar, Ph.D. (Arkansas State University)

	Session	Homp and Madical Connabia
	III	Hemp and Medical Cannabis
	Chair	Disea Deservelore d
	Chair	Diana Roopchand
		Rutgers University, USA
	Co-chair	Aruna Weerasooriya
		Prairie View A&M University, USA
1:10 PM - 1:40 PM	Keynote	O12. Youbin Zheng
	-	University of Guelph, Canada
		"Medicinal Cannabis production in controlled environments"
1:40 PM - 2:00 PM	Invited I	O13. Josee Guindon
		Texas Tech University Health Sciences Center, USA
		"Cannabinoids for the treatment of chronic pain and cancer: new
		insights and mechanisms of action"
2:00 PM – 2:20 PM	Invited II	O14. Jan Frederik Stevens
		Oregon State University, USA
		"Al-assisted discovery of bioactive minor cannabinoids from hemp"
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2:20 PM – 2:35 PM	Oral I	O15. Wesley Raup-Konsauvage Penn State College of Medicine, USA
		"High cannabigerol hemp extract moderates colitis and modulates the microbiome in an inflammatory bowel disease model"
2:35 PM – 2:50 PM	Oral II	O16. Negusse F. Kidane Prairie View A&M University, USA "Evaluation of the nutritional profile of different hemp plant biomass and spent hemp biomass (SHB) as a potential feed supplement for goats"

2:50 PM – 3:10 PM	Coffee Break	
	Session	Production, Strategies, and Challenges
	IV Chair	Dem Deu
	Cildii	Ram Ray Prairie View A&M University, USA
	Co-Chair	Sachin Gadekar
		Prairie View A&M University Algae Center of Excellence - The Algae Foundation, USA
3:10 PM – 3:40 PM	Keynote	O17. Ram Ray
		Prairie View A&M University, USA
		"Climate change impact on medicinal plants growth and spatial distributions"
3:40 PM – 4:00 PM	Invited I	
		O18. Abdul L Khan University of Houston, USA
		Oniversity of Houston, USA
		"Frankincense biosynthesis pathway: a lead for new medicinal products development"
4:00 PM – 4:20 PM	Invited II	O19. Russell A. Jessup
		Texas A&M University, USA
		"The Hemp Conversion Program: Developing a public hemp germplasm collection with maximized genetic diversity"
4:20 PM – 4:35 PM	Oral I	O20. Sirimal Premakumara, Ph.D. University of Colombo, SRI LANKA
		"Multifunctional health food/supplement properties of Ceylon cinnamon Cinnamomum zeylanicum"

4:35 PM – 4:50 PM	Oral II	O21. Samikshya Bhattarai Texas A&M University, USA "Supplemental lighting influences the antioxidant content and associated kinetic attributes in greenhouse-grown tomatoes"
5:00 PM – 7:00 PM		Poster Presentation

Day 3: October 5, 2026 (Saturday)

Prairie View A&M University

Registration and sessions V-VIII: Willie A. Tempton Memorial Student Center (MSC) Auditorium

Lunch boxes: Outside auditorium

Gala Dinner: MSC ballroom

Shuttle vans will run every 10-15 minutes from the assigned Best Western hotel to the university between 7:30 am and 8:30 am. Return from the university to the hotels will be between 6:30 pm and 7:30 pm

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8:00 AM - 8:30 AM		Registration
	Session V	Bioactive Compounds of Plants and Their Roles in Human Health I– Cancer
	Chair	Jeremy Johnson University of Illinois Chicago, USA
8:30 AM – 9:00 AM	Keynote	O22. Chendil Damodaran Texas A&M University "A modified natural small molecule for triple-negative Breast cancer"
9:00 AM – 9:20 AM	Invited I	O23. Bal L. Lokeshwar Georgia Cancer Center at Augusta University "Molecular hybrids of natural products against multidrug-resistant advanced bladder cancers"

9:20 AM – 9:40 AM	Invited II	O24. C.V. Rao Oklahoma University College of Medicine "Colorectal cancer interception by medicinally active plant compounds"
9:40 AM –9:55 AM	Oral I	O25. Srinandhini Chandran University of Houston, USA "Immunostimulatory and anti-cancer effects of <i>Calocybe indica</i> mushroom"
9:55 AM – 10:10 AM	Oral II	O26. Ahmed Darwish Texas A&M University, USA "Bioactive metabolites and cytotoxicity for eight blueberry cultivars"
10:10 AM–10:30 AM		Coffee Break

	Session VI	Bioactive Compounds of Plants and Their Roles in Human Health II – Inflammatory Diseases and Beyond
	Chair	Andrea Doseff Michigan State University, USA
	Co-chair	Sepideh Mohammadhosseinpour MD Anderson Cancer Center, USA
10:30 AM–11:00 AM	Keynote	O27. Susanne Talcott Texas A&M University, USA "Microbiome-polyphenol-host Interactions in obesity – The gut- brain axis"
11:00 AM–11:20 AM	Invited I	O28. Dingbo (Daniel) Lin Oklahoma State University, USA "Zeaxanthin metabolism in type 2 diabetes: A microbiome perspective"
11:20 AM–11:40 AM	Invited II	O29. Andrea Doseff Michigan State University, USA "Flavonoids as biomedicines: Regulation of microbiome-immune cell function in obesity-induced fatty liver disease"

11:40 AM–11:55 AM 11:55 AM –12:10 PM	Oral I Oral II	 O30. Murendeni Nethengwe Cape Peninsula University of Technology, SOUTH AFRICA "Potential impact of Anchomanes difformis aqueous extract on testes and epididymis of diabetic animal model" O31. Rocio Rivera Rodriguez University of Illinois at Chicago, USA "Dietary phytochemicals modulate inflammatory response in ulcerative colitis patient-derived colonoids"
12:10 PM – 1:00 PM		Panel Discussion
		Cannabis Fiber Research Andrew Pardo, Ph.D. Bayou City Hemp Co.
1:00 PM – 2:00 PM		Lunch
	Session VII	Medicinal / Functional Foods
	Chair Co-chair	Rao Mentreddy Alabama A&M University, USA Sun-Ok Lee University of Arkansas, USA
2:00 PM – 2:30 PM	Keynote	O32. Charles Cantrell USDA-ARS-NPURU, USA "Capsiate enriched extracts from <i>Capsicum</i> sp. fruit and its associated pharmacological activities"
2:30 PM – 2:50 PM	Invited I	O33. Diana N. Obanda University of Maryland, USA " <i>Urtica dioica:</i> A Functional food for protection against dysbiosis, Inflammation, insulin resistance and obesity"
2:50 PM – 3:10 PM	Invited II	O34. Vikas Dadwal Texas A&M University, USA "Synergistic effects of citrus terpenoid and dietary fibers on <i>Lactobacillus</i> growth and metabolite production"

3:10 PM - 3:25 PM	Oral I	
	erari	O35. Chamila VL Jayasinghe Wayamba University of Sri Lanka, SRI LANKA
		"Hypoglycaemic effect of <i>Coccinia grandis</i> leaves extract encapsulated herbal porridge"
3:25 PM – 3:40 PM	Oral II	
		O36. Srinivasa Rao Mentreddy Alabama A&M University. USA
		Alabama A&M University, USA
		"Brassicas: What makes them functional foods"
3:40 PM – 4:00 PM		Coffee Break
	Session VIII	Emerging technologies in medicinal plant research
	Chair	Alok Arun California State University Stanislaus, USA
	Co-Chair	Fabricio Medina-Bolivar
	CO-Chair	Arkansas State University, USA
4:00 PM – 4:20 PM	Invited I	020 Sania Detar, Dh.D.
4:00 PW - 4:20 PW	Invited I	O38.Sonia Peter, Ph.D Biocultural Education and Research Programme, BARBADOS
		"Tea phenols and citizen science for health"
4:20 PM – 4:40 PM	Invited II	O39. Luis Pietro, Ph.D.
		Science, Technology and Research Trust, PUERTO RICO
		"Exploring Puerto Rican biodiversity through mass spectrometry based metabolomics: initial studies in natural products
		discovery"
4:40 PM – 4:55 PM	Oral I	O40. Gaurav Gajurel
		Arkansas State University, USA
		"Production of bioactive isoflavones in elicited hairy root cultures
		of pigeon pea"
4:55 PM – 5:10 PM	Oral II	O41. Deepak Kumar Jha
		Texas A&M University, USA
		"Seed nanopriming with nitrogen-doped carbon dots enhances
		yield, quality, and potential health-promoting attributes in tomato
		fruit"
5:10 PM – 5:25 PM	Oral III	O41. Pariksha Thapa
		University of Illinois at Chicago, USA
		"Screening of xanthones from Garcinia mangostana to target the
		allosteric site in BiP to overcome drug resistant prostate cancer"

6:30 PM – 8:00 PM	Closing Ceremony (Gala Dinner) and Awards (additional pre-registration required)
	President
	Executive Editor- JMAP
	Awards
	2025 ACMAP Conference Announcement
	Executive Director

Day 4: October 6, 2024 (Sunday)

9:00 AM – 12 PM	Field Trip
	Boueu Citi Hemp Company (Houston)
	Bayou Citi Hemp Company (Houston)
	(https://www.bayoucityhemp.com)
	(roundtrip transportation included –
	additional pre-registration required)
	Pick-up time at hotel: 9 am
	•
	Tour: 10 am – 11 am
	Return to hotel: 12 pm
	(driving time between the hotel and Houston, ~ 1 hour)

Poster Presentations

P1 - Glucosyloxybenzyl 2R-benzylmalate and glucosyloxybenzyl 2R-isobutylmalate derivatives from Arundina graminifolia

<u>Opeyemi Joshua Olatunji</u>¹ and Florence Auberon². ¹ African Genome Center, Mohammed VI Polytechnic University, Benguerir, 43150, Morocco *and* Strasbourg University, Faculty of Pharmacy, UMR 7200, 67400 Illkirch-Graffenstaden, France. E-mail: joshua.olatunji@um6p.ma

P2 - Antioxidant properties of selected anti-cancer plant extracts cued from Sri Lankan Traditional Medicine

<u>Jivendra Wickramasinghe¹</u>, Vajira Dissanayaka², Preethi Udagama¹, Aruna Weerasooriya³, Hemali Goonasekera². ¹Faculty of Science, University of Colombo, Sri Lanka, ²Faculty of Medicine, University of Colombo, Sri Lanka, and ³Prairie View A&M University, Texas. E-mail: <u>jivendra@sci.cmb.ac.lk</u>; <u>hemali@anat.cmb.ac.lk</u>

P3 - Impact of soil quality on cannabinoid and terpene content of hemp

Francisco T. Chacon¹, <u>Shawn A. Raup-Konsavage²</u>, Kelly Greenland³, Robert Gearhart³, Dhimant Desai², Shouhao Zhou⁴, Joshua J. Kellogg¹, and Wesley M. Raup-Konsavage^{2 1} Department of Veterinary & Biomedical Sciences, Penn State University, State College, PA, USA ² Department of Pharmacology, Penn State University College of Medicine, Hershey, PA, USA ³ Keystone State Testing Laboratories, Harrisburg, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ³ Keystone State University College of Medicine, Hershey, PA, USA ³ Keystone State University College of Medicine, Hershey, PA, USA ³ Keystone State University College of Medicine, Hershey, PA, USA ³ Keystone State University College of Medicine, Hershey, PA, USA ³ Keystone State University College of Medicine, Hershey, PA, USA ³ Keystone State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine, Hershey, PA, USA ⁴ Department of Public Health Sciences, Penn State University College of Medicine,

P4 - Assessing the antiproliferative effects of *Thalassia* sp. extracts on metastatic colorectal cancer cell line

<u>Abner J. Colón Colón</u>, Rosalinda Aybar Batista, Gerardo Laureano Rosario, Naiomy Ríos Colón, Ángel R. Núñez Marrero & Alok Arun*. Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, Barranquitas, PO Box 517, Puerto Rico, USA. E-mail: abncol9666@br.uipr.edu; *alok_arun@br.inter.edu

P5 -

P6 - High throughput screening of NCI-Natural Product Repository extracts that inhibit androgen receptorvariants in castration resistant prostate cancer

Neha Tyagi¹, Sepideh Hosseiniporgham², Ashish Tyagi¹, Balaji Chandrasekaran¹, Katherine Bonilla², Inna Krieger², James Sacchettini², Chendil Damodaran¹ ¹ Department of Pharmaceutical Sciences, Texas AM University, College Station, TX 77842, USA, ² Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX, USA. <u>neha.tyagi@tamu.edu</u>

P7 - Evaluating the antiproliferative capacity of extracts from *Syringodium filiforme* in colorectal cancer cell line

<u>Aníbal José Nieves Martinez</u>² Rosalinda Aybar Batista^{1,2} Angel Nuñez Marrero^{1,2} Alok Arun^{1,2,1} Institute of Sustainable Biotechnology ²Inter American University of Puerto Rico Barranquitas, Puerto Rico, 00794 E-mail: <u>aninie3989@br.uipr.edu</u>.

P8 - A natural plant derived small molecule for treatment of chemoresistant colorectal cancer

Ashish Tyagi¹, Arun K Sharma², Chendil Damodaran¹ ¹Texas A&M Rangel College of Pharmacy, Reynolds Medical Bldg., College Station, Texas. ²Department of Pharmacology, Biochemistry and Molecular Biology, Penn State College of Medicine, Hershey, Pennsylvania. <u>ashishtyagi@tamu.edu</u>

P9 - Biochemical profiling of Garcinia livingstonei aqueous leaf extract: A preliminary study

<u>Oluwafemi O. Oquntibeju</u>^a, Murendeni Nethengwe^a, Nasifu Kerebba^b, Kunle Okaiyeto^a & Chinyerum S. Opuwari^c. ^aPhytomedicine and Phytochemistry Group, Department of Biomedical Sciences, Faculty of Health and Wellness Sciences, Cape Peninsula University of Technology, Bellville, 7535, South Africa. ^bDepartment of Chemistry, Makerere University, Kampala 7062, Uganda. ^cDepartment of Medical Biosciences, University of the Western Cape, Bellville, 7535, South Africa. Email: oguntibejuo@cput.ac.za; <u>bejufemi@yahoo.co.uk</u>

P10 - Protective consequences of Dicliptera roxburghiana against CCI4 induced renal toxicity In cice

Bushra Ahmad¹, Muhammad Rashid Khan², Arshad Jamil³ ¹Department of Biochemistry, Shaheed Benazir Bhutto Women University, Peshawar, 29000, Pakistan. ²Department of Biochemistry, Faculty of Biological Sciences, Quaid-i-Azam University Islamabad, 45320, Pakistan. ³Department of Plant Breeding and Genetics, University of Agriculture, Dera Ismail khan, 25000, Pakistan. bushraahmad@sbbwu.edu.pk

P11 -

P12 - Promising anti-diabetic and wound healing activities of biopolymers loaded natural products using cell lines and enzyme inhibition models

<u>J. Achyutha Devi</u> ¹Department of Zoology, R.B.V.R.R. Women's College, Narayanaguda, Hyderabad-500027, Telangana, India. E-mail: achyuthadevi@gmail.com

P13 - Unveiling the medicinal potential of the underutilized crop Arracacia xanthorrhiza

<u>Myrna Rodriguez González</u>*1, Luis Prieto², Jacobo Morales¹, Rosalinda Aybar Batista¹ & Alok Arun¹ ¹Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, PO Box 517, Barranquitas, Puerto Rico, 00794, USA. ²University of Puerto Rico Recinto de Rio Piedra PO Box 23341, San Juan, Pueto Rico, 00931, USA. Email: Myrnalizrg@gmail.com*

P14 - Antimicrobial effects of extracts from Liriodendron tulipifera on AMR Staphylococcus aureus

<u>Mojetoluwa Afolabi*</u>, Zhigang Xiao², Qunying Yuan¹. ¹Department of Biological Sciences, Alabama A&M University. Normal, Alabama, 35762. ²Department of Electrical Engineering and Computer Sciences, Alabama A&M University. Normal, Alabama, 35762. E-mail: <u>mojetoluwa.afola@bulldogs.aamu.edu</u>

P15 - Inhibition of angiotensin-converting enzyme (ACE) activity by cannabinoids from *Cannabis sativa L.*

Francisco T. Chacon¹, Kent Vrana³, <u>Joshua J. Kelloga</u>^{1,2}. ¹Intercollege Graduate Degree Program in Plant Biology, ²Department of Veterinary and Biomedical Sciences, Pennsylvania State University, University Park, State College, PA, USA 3Department of Pharmacology, Penn State College of Medicine, Hershey, PA, USA email: jjk6146@psu.edu

P16 - Determination of ingredient ratios in a dye used to protect American Ginseng (*Panax quinquefolius*) from poaching in the Shenandoah National Park

Shyleigh A. Good^{1,} Dr. Chiara Elmi², and Dr. Lindsay K. Caesar¹. ¹Department of Chemistry and UPDATED – September 23, 2024

Biochemistry; ²Department of Geology and Environmental Science, James Madison University, Harrisonburg, VA 22807. E-mail: goodsa@dukes.jmu.edu; elmicx@jmu.edu; caesarlk@jmu.edu

P17 - Identification of terpenes in Industrial Hemp (Cannabis sativa L.)

<u>Shamika Piumal Raja Hewage</u>¹, Surendra Surujdeo-Maharaj², Aruna Weerasooriya² and Harshica Fernando¹ Department of Chemistry and ²Cooperative Agricultural Research Center, College of Agriculture, Food & Natural Resources, Prairie View A&M University, Prairie View, TX. E-mail: rwishvajith@pvamu.edu; hufernando@pvamu.edu

P18 - Evaluating the role of LED grow lights in enhancing hemp biomass

<u>Jayland J. J. Jones</u>¹, A.D. Weerasooriya¹ and S. Surujdeo-Maharaj¹, ¹Cooperative Agricultural Research Center, College of Agriculture, Food and Natural Resources, Prairie View A&M University, Prairie View, TX 77446. Presenting author's E-mail: <u>jjones449@PVAMU.EDU</u>; Corresponding author E-mail: <u>susurujdeomaharaj@pvamu.edu</u>

P19 - Exploring the anticancer properties of *Asparagopsis taxiformis* algae; as a potential therapeutic agent against cancer and its application in modern medicine

<u>Sebastián Alicea De Jesús</u>¹, Jacobo Morales and Alok Arun. Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, Barranquitas, PO Box 517, Puerto Rico, USA. Email: sebali9839@br.uipr.edu; Presenting author: sebali9839@br.uipr.edu

P20 - Production of genistein and its prenylated analog isowighteone in pigeon pea hairy roots and their cytotoxic effect on breast cancer cells

<u>Carlos Balmaceda</u>¹, Gaurav Gajurel^{1,2}, and Fabricio Medina-Bolivar^{2,3}. ¹Arkansas Bioscience Institute, ²Molecular Biosciences Graduate Program, ³Department of Biological Sciences, Arkansas State University, Jonesboro, AR 72401. E-mail: <u>cbalmacedacuenca@astate.edu;</u> <u>fmedinabolivar@astate.edu</u>

P21 - Dietary phytochemicals modulate inflammatory responses in ulcerative colitis patient-derived colonoids

<u>Rocío Rivera Rodríguez¹</u>, Torunn Bruland³, Ingunn Bakke³, and Jeremy James Johnson^{1, 2}. ¹Department of Pharmaceutical Sciences and ²Department of Pharmacy Practice, University of Illinois Chicago, Chicago, IL 60612 and ³Department of Clinical and Molecular Medicine, Norwegian Institute of Science and Technology, Trondheim, Norway 7030. E-mail: <u>rriver49@uic.edu</u>; <u>iljohn@uic.edu</u>

P22 - The effects of nitrogen fertilization on the yield and nutritional content of Purslane (*Portulaca oleracea*)

Eniola Faluyi, Peter A.Y. Ampim, Eric Obeng and Selamawit Woldesenbet. College of Agriculture, Food and Natural Resources, Prairie View A&M University, Prairie View, TX 77446. E-mail: paampim@pvamu.edu. <u>efaluyi@PVAMU.EDU</u>

P23 - Ecologically inspired co-cultures of anti-fungal bacteria to combat white-nose syndrome

Evelyn Haugh¹, Alexa Lee¹, Ashley Clements¹, Diana Northup², Paris Salazar-Hamm², Lindsay Caesar¹. ¹Dept. of Chemistry and Biochemistry, James Madison University, Harrisonburg, VA 22807, ²Dept. of Biology, University of New Mexico, Albuquerque, NM 87131. E-mail: haughpg@dukes.jmu.edu; caesarlk@jmu.edu

P24 - Comparison of health-beneficial compounds: Lycopene and citrulline retention in watermelon juice UPDATED – September 23, 2024

using hgh-pressure homogenization vs. heat processing

Jayashan Adhikaria,b, Rakesh Singhc, Koushik Adhikarid, Bhimanagouda S. Patila,b* aVegetable and Fruit Improvement Center, Department of Horticultural Sciences, Texas A&M University, 1500 Research Parkway, Suite A120, College Station, TX 77845-2119, U.S.A. bDepartment of Food Science and Technology, Texas A&M University, 1500 Research Parkway, Suite A120, College Station, TX 77845-2119, U.S.A. cDepartment of Food Science and Technology, University of Georgia, 100 Cedar St., Athens, GA 30602, U.S.A. dDepartment of Food Science and Technology, University of Georgia, 1109 Experiment St., Griffin, GA 30223, U.S.A.

P25 - Utilizing biopolymers from lactic acid bacteria to enhance the stability, bioactivity, and antimicrobial efficacy of eugenol

Sangeeta Balyan, Vikas Dadwal and Bhimanagouda S. Patil* Vegetable and Fruit Improvement Center, USDA, National Center of Excellence, Department of Horticultural Sciences, Texas A&M University, 1500 Research Parkway, Suite A120, College Station, TX 77845, USA. Email: Sangeetabalyan05@tamu.edu; <u>Bhimanagouda.Patil@ag.tamu.edu</u>

P26 - Extraction, characterization, and assessment of the stress-releasing ability of essential oil extracted from violet water lily

CVL Jayasinghe^{1*}, AGSS Premarathna¹, A Chandrasekara², K Yakandawala³.¹Department of Food Science and Technology, ²Department of Applied Nutrition, Faculty of Livestock, Fisheries and Nutrition, and ³Department of Horticulture and Landscaping Gardening, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura. Gonawila, 60170, Sri Lanka. Email: cjayasinghe@wyb.ac.lk

P27 - Protection of gut-liver axis by gut recycled herbal components during chemotherapy

<u>Vesna Tumbas Saponjac^{1,2}</u>, Zicong Zheng¹, Rongjin Sun¹, Jie Chen¹, Songpol Srinual¹, Terry Yin¹, Ming Hu^{1,2} and Rashim Singh^{1,2}. ¹Department of Pharmacological and Pharmaceutical Sciences, University of Houston College of Pharmacy, 4349 Martin Luther King Boulevard, Houston, TX 77204-5000 and ²Sanarentero LLC, University of Houston Technology Bridge, Research Park, 5000 Gulf Fwy, Bldg 5, Rm 116, Houston, TX 77023. E-mail: vtumbass@central.uh.edu

P28 -

P29 - Antioxidant, anti-diabetics, and anti-inflammatory bioactives of banana (*Musa paradisiaca*) inflorescence in a processed salad

C.V.L. Jayasinghe^{1*}, G.V.S.Y. Jayarathna¹ and P.U.S. Peiris^{2, 1}Department of Food Science and Technology; ²Office of the Dean, Wayamba University of Sri Lanka, Makandura, Gonawila,60170, Sri Lanka. Email: <u>cjayasinghe@wyb.ac.lk</u>

P30 - Discovery and development of anxiolytic agents from tropical marine macroalgae

Lymelsie Aponte Ramos⁴, María F. Acevedo Kury², Geraldine M. Ortiz Sosa², Janiennid Alicea Tirado³, Ricardo M. Cruz Sánchez¹, Eduardo Caro Díaz⁵, Ricardo Chiesa¹. ¹Department of Biology, ²Department of Natural Sciences, ³Department of Chemistry, ⁴Department of Social Sciences, University of Puerto Rico, Cayey, Puerto Rico, and ⁵UPR – Medical Science Campus. E-mail: lymelsie.aponte@upr.edu and ricardo.chiesa@upr.edu

P31 - Study of the chemical composition and biological activities of *Piper* sp.

Natalia Rivera-Colón¹, Pablo E. Vivas-Mejía², Lilliam Villanueva-Alicea², José Rodríguez-Medina²

and Claudia A. Ospina-Millán¹. ¹Dept. of Natural Sciences and Mathematics, Inter American University of Puerto Rico, Bayamón, PR 00957 and ²Dept. of Biochemistry, University of Puerto Rico, Medical Sciences Campus, PR 00936. E-mail: nrivera2619@interbayamon.edu; cospina@bayamon.inter.edu

P32 - Tannin concentration and bioactivity of field grown Lespedeza species

Thomas H. Terrill¹, Bryanna Morning¹, Erica M. Courson¹, Aftab Siddique¹, James P. Muir², Nicole M. Cherry², and J. Bradley Morris³. ¹Agricultural Research Station, Fort Valley State University, Fort Valley, GA 31030; ²J. P. Muir, N. M. Cherry, Texas A&M AgriLife Research, Stephenville, TX 76402; and ³J. B. Morris, USDA/ARS Plant Genetic Resources Conservation Unit, Griffin, GA 30223. E-mail: terrillt@fvsu.edu

P33 - Isolation and chemical modification of cembrane diterpenes from Nicotiana tabacum

Paula A. Vega-García¹, Abimael Rodríguez², Claudia A. Ospina-Millán¹. ¹Dept. of Natural Sciences and Mathematics, Inter- American University of Puerto Rico, Bayamón, PR, 00957 and ²Dept. of Chemistry, University of Puerto Rico, Rio Piedras, 00936. Emails: pvega6022@interbayamon.edu; cospina@bayamon.inter.edu

P34 - Isolation, preparation, and evaluation of quassinoids as STAT3 inhibitors in breast cancer

<u>Claudia A. Ospina-Millán</u>¹, Paula Vega-García¹, Stella Alicea-Ayala¹, Pablo E. Vivas-Mejía², José Rodríguez-Medina² and Eliud Hernández-Ofarrill². ¹Dept. of Natural Sciences and Mathematics, Inter American University of Puerto Rico, Bayamón, PR 00957 and ²Dept. of Biochemistry and Pharmaceutical Sciences, University of Puerto Rico, Medical Sciences Campus, PR 00936. E-mail: cospina@bayamon.inter.edu

P35 - Maternal broccoli sprout consumption: A novel strategy to reprogram offspring gut microbiome and prevent early-life obesity

Yue Jiang¹, Yuanyuan Li¹, Trygve Tollefsbol². ¹Department of Nutrition and Food Science, University of Maryland College Park, College Park, Maryland, USA ²Department of Biology, University of Alabama at Birmingham, Birmingham, Alabama, USA Email: yjiang11@umd.edu; roseli15@umd.edu; trygve@uab.edu

P36 - Evaluating the anti-cancer potential of Padina Extracts in colorectal cancer cell lines

Paola Del Mar Diaz Alvarado, Gerardo Laureano, Rosalinda Aybar Batista, Angel Núñez Marrero & Alok Arun. Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, PO Box 517. Barranquitas, Puerto Rico, 00794. Email: paodia8142@br.uipr.edu, alok_arun@br.inter.edu

P37 - Determining the anti-proliferative capacity of colorectal cancer cell line treated with extracts derived from Sargassum

<u>David Arroyo Berrios</u>, Gerardo Laureano, Rosalinda Aybar Batista, Angel Núñez Marrero & Alok Arun. Institute of Sustainable Biotechnology, Inter American University of Puerto Rico, PO Box 517. Barranquitas, Puerto Rico, 00794. E-mail: <u>davarr0778@br.uipr.edu</u>; <u>anunez@br.inter.edu</u>

P38 - Effects of low-temperature plasma on germination, seedling growth and nutrient profile of microgreens

<u>Sravan Kumar Sanathanam</u>¹, Trang Pham¹, Judith Boateng², Tasie Ogechukwu², and Srinivasa Rao Mentreddy¹. ¹Dept. of Natural Resources and Envi. Sciences, and ²Department of Food and Animal Sciences, Alabama A&M University, Normal, AL 35811. E-mail: sravankumar.sana@bulldogs.aamu.edu

P39 - Use of emerging technologies in advancing medicinal plant research: a Prospective

<u>Aftab Siddique1</u> and Thomas H. Terrill¹. ¹Fort Valley State University, GA, 31030. E-mail: aftab.siddique@fvsu.edu

P40 - Health benefits of peanuts: A deep dive into medicinal properties

Poonam Khatri, and Nirmal Joshee. Graduate Program in Biotechnology, Agricultural Research Station, Fort Valley State University, Fort Valley, GA 31030, USA. E-mail: <u>fnu.poonam@fvsu.edu</u>; josheen@fvsu.edu

P41 - Physico-chemical evaluation and anti-diabetic property of *Clerodendrum splendens* (G. Don) leaves (Verbenaceae) on alloxan induced diabetic Albino wistar rats

¹Obi Patrick Ebele, ¹Ezeorah Chukwuebuka Collins, ² Ezugwu Christopher Obidike ¹Department of Pharmacognosy, Faculty of Pharmaceutical Sciences, Enugu State University of Science and Technology, Enugu, Nigeria ²Department of Pharmacognosy and Environmental Medicines, Faculty of Pharmaceutical Sciences, University of Nigeria, Nsukka, Enugu, Nigeria **Corresponding Author:** Obi Patrick Ebele **e-mail:** <u>patrick.obi@esut.edu.ng</u>

P42 - Isolation and anticancer effects of tulareydilactone and glaucarobinone quassinoids from *Simarouba tulae*

<u>Reydiliz Nieves-Acevedo1</u>, Zulma Ramos², Eliud Hernández-Ofarrill², and Claudia A. Ospina-Millán¹. ¹Dept. of Natural Sciences and Mathematics, Inter-American University of Puerto Rico, Bayamón Campus, 00957 and ²Dept. of Pharmaceutical Sciences, School of Pharmacy, University of Puerto Rico, Medical Sciences Campus, 00936. E-mail: rnieves3305@interbayamon.edu, cospina@bayamon.inter.edu

P43 - Utilizing biopolymers from lactic acid bacteria to enhance the stability, bioactivity, and antimicrobial efficacy of eugenol

Sangeeta Balyan, Vikas Dadwal and Bhimanagouda S. Patil. Vegetable and Fruit Improvement Center, USDA, National Center of Excellence, Department of Horticultural Sciences, Texas A&M University, College Station, TX 77845, USA. <u>E-mail: sangeetabalyan05@tamu.edu;</u> bhimanagouda.Patil@ag.tamu.edu

P44 - Characterization of elemental contents and volatile compounds in *Moringa oleifera* leaves grown in Southern Texas

Alpana Lakshmi¹, Sanjita Gurau^{2,*}, Selamawit Woldesenbet², Aruna Weerasooriya² ¹College of Education, Prairie View A&M University, Prairie View, TX 77446 ²College of Agriculture Food and Natural Resources, PVAMU, Prairie View, TX 77446

P45 - Phytochemistry of milk thistle (Silybum marianum) and its therapeutic potential

Mohammad Asif Gawhari,¹ Baljinder Kaur¹¹ Punjabi University, Patiala

P46 - Mechanistic interplay in broccoli glucoraphanin-induced beneficial effects on obesity prevention

<u>Taiwo Bankole 1</u>, Zhenhai Li ¹ and Yuanyuan (Rose) Li ¹. ¹ Department of Nutrition and Food Sciences, College of Agriculture and Natural Resources. University of Maryland, College Park. MD 20740. E-mail: tbankol1@umd.edu; roseli15@umd.edu

P47 - Plant-based functional foods of the Sultanate of Oman: Innovation and future perspectives

Ali Al Lawati

Natural and Medical Sciences Research Center, University of Nizwa, Oman. E-mail: ali.allawati@unizwa.adu.om

Prairie View A&M University

Campus Map

Commented [FM1]: Include parking lot details.

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Reserved Parking on October 3 and October 5 is at Lot 91. Parking on October 4 is at Lot 14. See red and yellow circles for locations of the event.

