

# 11<sup>TH</sup> ANNUAL ACMAP CONFERENCE 2022

SCIENTIFIC PROGRAM (June 28 – July 2, 2022)

*Times are in Atlantic Standard Time (AST)*

<b>Day 1</b> <b>Inter American University of Puerto Rico (IAUPR) - Barranquitas Campus</b> <b>VENUE: MULTIUSOS</b> <b>Tuesday, June 28, 2022</b>		
2:00 PM – 8:00 PM		COVID-19 Vaccination check and Registration
2:00 PM		Shuttle pick-up from Hyatt Place Hotel – Bayamon (outside the entrance door)
4:30 PM – 5:30 PM	<b>Welcome</b>	<b>Master of Ceremony and Chair:</b> Dr. Alok Arun <b>Invocation:</b> Rev. Arnaldo Cintron Miranda <b>Co-Chair of ACMAP 2022:</b> Dr. Nirmal Joshee <b>Rector,</b> Inter American University of Puerto Rico, Barranquitas <b>Rector,</b> Inter American University of Puerto Rico, Bayamon <b>President,</b> Inter American University of Puerto Rico <b>Chairman,</b> Board of Trustees, Inter American University of Puerto Rico <b>Message of President ACMAP:</b> Dr. Anait S. Levenson <b>Message of Executive Director ACMAP:</b> Dr. Fabricio Medina-Bolivar
5:30 PM – 6:15 PM	<b>Plenary</b>	<b>Nobel Laureate Dr. David Julius (virtual)</b> Morris Herzstein Chair in Molecular Biology and Medicine University of California San Francisco, USA  <b>From peppers to peppermints: natural products as probes of the pain pathway</b>  Q&A (moderated by Alok Arun)
6:15 PM – 7:30 PM	<b>Opening ceremony</b>	Cultural event and dinner  Vote of thanks: <b>Alok Arun (Chair)</b>  Group Photo
8:00 PM		Shuttle leave for Hyatt Hotel Bayamon

## Day 2

**IAUPR – Bayamon Campus**  
**Wednesday, June 29, 2022**

**Shuttle pick-up at 7:30 am (Hyatt Place Hotel – Bayamon)**

8:00 AM – 8:30 AM

**BREAKFAST**

		<p><b>Session I: Botanicals of Caribbean diaspora</b>  <i>(Venue: Salon Usos Múltiples/SUM)</i></p> <p><b>Chair</b>  <b>S. Rao Mentreddy</b>  Alabama A&amp;M University, USA</p> <p><b>Co-chair</b>  <b>James Ackerman</b>  University of Puerto Rico, Puerto Rico</p>	<p><b>Session II: Bioactive compounds of plants and their roles in human health I (Cancer)</b>  <i>(Venue: Theatre)</i></p> <p><b>Andrea Doseff</b>  Michigan State University, USA</p> <p><b>Claudia Ospina</b>  Inter American University of Puerto Rico, Puerto Rico</p>
8:30 AM – 9:10 AM	<b>Keynote</b>	<p><b>Sonia Peters</b>  Bioscience Barbados Ltd., Barbados</p> <p><b>Caribbean Plant Biodiversity – unlocking the potential of molecular diversity.</b></p>	<p><b>Nihal Ahmad</b>  University of Wisconsin, USA</p> <p><b>Grape antioxidants in skin cancer management</b></p>
9:10 AM – 9:40 AM	<b>Invited I</b>	<p><b>Sylvia Mitchell (virtual)</b>  University of West Indies, Jamaica</p> <p><b>Thirty-five years of tropical plant tissue culture R&amp;D in Jamaica: the challenges and breakthroughs</b></p>	<p><b>Anait S. Levenson</b>  Long Island University, USA</p> <p><b>The role of dietary stilbenes in prostate cancer interception: evidence from preclinical studies.</b></p>
9:40 AM – 10:10 AM	<b>Invited II</b>	<p><b>Martha Giraldo</b>  University of Puerto Rico, Puerto Rico</p> <p><b>Role of roots and tuber crops in global household food security</b></p>	<p><b>Yuanyuan (Rose) Li</b>  University of Missouri, USA</p> <p><b>Maternal epigenetic diets on transgenerational breast cancer prevention</b></p>
10:10 AM – 10:40 AM	<b>Invited III</b>	<p><b>Alok Arun</b>  Inter American University of Puerto Rico, Puerto Rico</p> <p><b>Biology of underutilized crops of the Caribbean</b></p>	<p><b>Virginie Aires (virtual)</b>  University of Burgundy, France</p> <p><b>Bioactive dietary compounds: promising therapeutic adjuvants through the targeting of tumor lipid metabolism</b></p>
10:40 AM – 11:00 AM	<b>COFFEE BREAK</b>		

11:00 AM – 11:15 AM		<b>Please move to Theatre</b>	<b>Gisella Campanelli (virtual)</b> Long Island University, USA  <b>Chemopreventive activity of Gnetin C in murine tumor models of prostate cancer</b>
11:15 AM – 11:30 AM		<b>Please move to Theatre</b>	<b>Mirielle Nauman</b> University of Illinois at Chicago, USA  <b>Garcinia mangostana (mangosteen) xanthenes promote androgen receptor degradation</b>
11:30 AM -12:30 PM	<b>Workshop</b>	<b>Plant tissue culture of medicinally active plants</b> (Jeffrey Adelberg, Sadanand Dhekney, Nirmal Joshee) (Venue: Salon Usos Multiples/SUM)	
12:20 PM- 1:30 PM	<b>LUNCH</b>		
	<b>Chair</b>  <b>Co-chair</b>	<b>Session III: Chemistry of medicinal Plants</b> (Venue: Salon Usos Multiples/SUM)  <b>Sun-Ok Lee</b> University of Arkansas, USA  <b>Bruyanelis Ramos Aponte</b> Universidad Ana G. Méndez, Puerto Rico	<b>Session IV: Ethnobotany, bioprospecting and production</b> (Venue: Theatre)  <b>Jeffrey Adelberg</b> Clemson University, USA  <b>Angel Nunez Marrero</b> Inter American University of Puerto, Puerto Rico
1:30 PM -2:10 PM	<b>Keynote</b>	<b>Jeremy Johnson</b> University of Illinois at Chicago, USA  <b>Translational development of phytochemicals and highly characterized plant extracts</b>	<b>James E Simon (virtual)</b> Rutgers University, USA  <b>Bioexploration of indigenous plants in sub-Sahara Africa</b>
2:10 PM – 2:40 PM	<b>Invited I</b>	<b>Fabricio Medina-Bolivar</b> Arkansas State University, USA  <b>Combined elicitation and targeted metabolomics approach for the discovery of medicinally active prenylated stilbenoids in hairy root cultures of peanut and pigeon pea</b>	<b>S. Rao Mentreddy</b> Alabama A&M University, USA  <b>Ethnobotany and production of three high-value medicinally active herbs, basil, turmeric, and mountain mint in North Alabama</b>
2:40 PM – 3:10 PM	<b>Invited II</b>	<b>Joshua J Kellogg</b> Pennsylvania State University, USA  <b>Biochemometric molecular networking to discover new aryl hydrocarbon receptor ligands from the diet</b>	<b>Prabodh Satyal (Virtual)</b> Aromatic Plant Research Centre, USA  <b>Instrumental challenges with essential oil adulteration.</b>

3:10 PM – 3:40 PM	<b>Invited III</b>	<b>Rodolfo Juliani</b> Rutgers University, USA  Quality, chemistry, and biological activity of the West African spice, grains of paradise ( <i>Aframomum melegueta</i> )	<b>Nirmal Joshee</b> Fort Valley State University, USA  Ethnobotanical knowledge paving way for medicinal compounds and value-added products in Paulownia tree
3:40 PM – 4:00 PM	<b>COFFEE BREAK</b>		
4:00 PM – 4:15 PM	<b>Oral talk</b>	<b>Joseph Horzempa</b> West Liberty University, USA  Dillapole, a compound extracted from fennel, exhibits potential as an antibacterial chemotherapy by dampening virulence factor expression	<b>B.K. Biswas</b> Fort Valley State University, USA  Stevia and Turmeric, consumption can help for anti-cancer benefits, know how to grow and consume
4:15 PM – 4:30 PM	<b>Oral talk</b>	<b>Marco Nuno De Canha</b> University of Pretoria, South Africa  Harnessing the potential of two southern African plants for the treatment of acne vulgaris	<b>Please move to Salon Usos Multiples/SUM</b>
4:30 PM – 6:00 PM	<b>POSTER PRESENTATION</b>		
<b>Day 3 IAUPR – Bayamon Campus Thursday, June 30, 2022</b>			
<b>Shuttle pick-up at 7:30 am (Hyatt Place Hotel – Bayamon)</b>			
8:00 AM – 8:30 AM	<b>BREAKFAST</b>		
	<b>Chair</b>  <b>Co-chair</b>	<b>Session V: In vitro propagation and conservation of value-added plants</b> <i>(Venue: Salon Usos Multiples/SUM)</i>  <b>Nirmal Joshee</b> Fort Valley State University, USA  <b>Dr. Elizabeth Padilla Crespo</b> Inter American University of Puerto Rico, Puerto Rico	<b>Session VI: Bioactive compounds of plants and their roles in human health II (Inflammatory diseases)</b> <i>(Venue: Theatre)</i>  <b>Anait S. Levenson</b> Long Island University, USA  <b>Dr. Lizbeth Romero Perez</b> Inter American University of Puerto Rico, Puerto Rico
8:30 AM – 9:10 AM	<b>Keynote</b>	<b>Sadanand Dhekney</b> University of Maryland, USA	<b>Andrea Doseff</b> Michigan State University, USA

		Optimizing in vitro culture techniques for precision breeding of perennial fruits: grapevine as a model	Flavonoids regulate macrophage immune function controlling cancer and halting obesity
9:10 AM – 9:40 AM	Invited I	<b>Jeff Adelberg</b> Clemson University, USA  Nutrients and lighting factors in controlling medicinal plant culture	<b>Susanne Mertens-Talcott (virtual)</b> Texas A&M University, USA  Interactions of tannins with the intestinal microbiome and anti-inflammatory activities
9:40 AM – 10:10 AM	Invited II	<b>Mahipal Singh Shekhawat (virtual)</b> Puducherry, India  In vitro regeneration of medicinal plants and analysis of structural plasticity of cells and tissues towards changed environmental conditions: A way forward to develop climate-resilient plants	<b>Diana Roopchand</b> Rutgers University, USA  Grape polyphenols and cannabidiol: mechanisms for promoting metabolic resilience
10:10 AM – 10:40 AM	Invited III	<b>Maria Luisa Villarreal Ortega (virtual)</b> Universidad Autónoma del Estado de Morelos, Mexico  Conservation of Mexican medicinal species with sedative and anti-inflammatory properties	<b>Kevin Tveter (10:10 AM–10:25 AM)</b> Rutgers University, USA  Metabolic benefits of grape polyphenol consumption on bile acid signaling in mice with intestine- and liver-specific deletion of Fxr
			<b>Meenakshi Sudhakaran (10:25 AM–10:40 AM)</b> Michigan State University, USA  Flavone apigenin regulates innate immune response through RNA binding protein hnRNPA2
10:40 AM-11:00 AM	<b>COFFEE BREAK</b>		
11:00 AM-11:15 AM	Oral talk	<b>Ramana Gosukonda</b> Fort Valley State University, USA  Machine learning models in plant tissue culture: a case study of Brahmi	<b>Please move to Salon Usos Multiples/SUM</b>
11:15 AM – 11:30 AM	Oral talk	<b>Samantha Sherman (virtual)</b> Fort Valley State University, USA  Histological examination of in vitro hyperhydric cultures of <i>Scutellaria lateriflora</i> .	<b>Please move to Salon Usos Multiples/SUM</b>
11:30 AM -12:30 PM	Workshop	<b>Writing and submitting scientific papers to JMAP (Adolfina Koroch) (Venue: Salon Usos Multiples/SUM)</b>	

12.30 PM – 1.30 PM	<b>LUNCH</b>		
1.30 PM – 6.30 PM	<b>TOUR</b>	Guided Old San Juan Tour (Contact registration desk for more information)	
<b>Day 4</b> <b>IAUPR Bayamon Campus</b> <b>Friday, July 1, 2022</b>			
<b>Shuttle pick-up at 7:30 am (Hyatt Place Hotel – Bayamon)</b>			
8:00 AM – 8:30 AM	<b>BREAKFAST</b>		
	<b>Chair</b>	<b>Session VII: Hemp and Medical Cannabis</b> <i>(Venue: Salon Usos Multiples/SUM)</i>  <b>Joshua Kellogg</b> Fort Valley State University, USA	<b>Session VIII: Plant and algae derived cosmeceuticals and nutraceuticals</b>  <b>Alok Arun</b> Inter American University of Puerto Rico, Puerto Rico
8:30 AM – 9:10 AM	<b>Keynote</b>	<b>Aruna Weerasooriya</b> Prairie View A & M University, USA  <b>Genetic complexity in Industrial hemp germplasm</b>	<b>Namrita Lall (virtual)</b> University of Pretoria, South Africa  <b>Reinforce urban skin by connecting with the origins</b>
9:10 AM – 9:40 AM	<b>Invited I</b>	<b>Oliver Kayser (virtual)</b> TU Dortmund University, Germany  <b>Endocannabinoid receptor pharmacology of rare cannabinoids</b>	<b>Sun-Ok Lee</b> University of Arkansas, USA  <b>Health-promoting effects of functional foods</b>
9:40 AM – 10:10 AM	<b>Invited II</b>	<b>Sadanand Dhekney</b> University of Maryland Eastern Shore, USA  <b>Screening industrial hemp cultivars for cannabinoid production in the Mid-Atlantic region</b>	<b>Bahar Aliakbarian (virtual)</b> Michigan State University, USA  <b>Upcycling food process byproducts for cosmeceutical applications: Case of cherry waste</b>
10:10 AM – 10:40 AM	<b>Invited III</b>	<b>Wesley Raup-Konsavage</b> Penn State University, USA  <b>Chasing the entourage effect in Cannabis</b>	<b>Thomas H. Terrill</b> Fort Valley State University, USA  <b>Nutraceutical and cosmeceutical properties of sericea lespedeza (Lespedeza cuneata)</b>
10:40AM – 11:00 AM	<b>COFFEE BREAK</b>		
11:00 AM – 11:15 AM	<b>Oral talk</b>	<b>Niranjan Aryal</b> VRX Labs, USA	<b>Ana-Marie Reid (virtual)</b> University of Pretoria, South Africa

		Cannabis testing labs; Quality control and standardization	Euclea natalensis A. DC., as an adjuvant, immunomodulator and hepatoprotectant
11:15 AM – 11:30 AM	Oral talk	<b>Ke Sui</b> Rutgers University, USA  Cannabidiol improves inflammation, glucose metabolism and bone loss in a murine model of female post-menopause in association with a bloom of Lactobacillus sp.	<b>Sepideh Mohammadhosseinpour (virtual)</b> Arkansas State University, USA  Prenylated stilbenoids from peanut increase the anticancer efficacy of paclitaxel in triple-negative breast cancer cells
11:30 AM – 12:10 PM	Keynote	Please move to Theatre	<b>A. Douglas Kinghorn (virtual)</b> The Ohio State University, USA  Discovery of anticancer agents of diverse natural origin
12:10 PM – 12:15 PM	Flash talk	Please move to Theatre	<b>Esther Mezhibovsky</b> Rutgers University, USA  Grape polyphenols may protect from diet induced obesity by preventing high-fat diet dampening of the hypothalamic-pituitary axis
12:15 PM – 12:30 PM	Flash talk	Please move to Theatre	<b>Claudia A. Ospina-Millán</b> Inter American University of Puerto Rico, Puerto Rico  Natural Products Research in Puerto Rico: Isolation of bioactive metabolites from tropical plants
12:30 PM – 1:30 PM	<b>LUNCH</b>		
1:30 PM – 4:30 PM	<b>LEISURE</b>		
4:30PM	Shuttle Pick for Restaurant from Hyatt Bayamon		
5:00 PM – 8:00 PM	<b>CLOSING CEREMONY (GALA DINNER) AND AWARDS</b>		
	<b>Day 5</b> <b>Saturday, July 2, 2022</b> <b>Field Excursions and Tours (Group basis)</b> Contact Registration/Information desk for details		