

Poster Session I – Sunday July 23, 2023

Analytical Chemistry

P-001 – Vicky Anderson - [Library Enabled Annotation for Botanical Natural Products \(LEAF BotNP\): Increasing the Representation of Botanical Spectra in Opensource Databases](#)

P-002 – Riley Blue - [Probing the Biological Function of Boron via 11B NMR and LCMS Analysis of Small Molecules](#)

P-003 – Timothy Bushman - [Bacterial Espresso? Accelerated Solvent Extraction of Bacterial Cell Pellet as a Method for the Improved Extraction Recovery of Selected Metabolites](#)

P-004 - Mary Dawn Celiz - [Sample Preparation of Microcystins in Dietary Supplements for LC-MS/MS Analysis](#)

P-005 - Sanem Hosbas Coskun - [Quantification of Triterpene Glycosides of Black Cohosh Standard Reference Materials \(SRMs\)](#)

Animal Studies

P-006 – Amy Keller - [Acute \(-\)-Epicatechin Treatment Improves Thermoneutral-Diminished Vasoreactivity](#)

Antibiotics

P- 007 – Logan Breiner - [1,2,3-Triazole Derivatives of the Antibiotic Natural Product Pleuromutilin](#)

P-008 – Susan Ensel - [A New 5-Alkyl Resorcinol Isolated from Gevuina papuana with Antibacterial Activity](#)

P-009 – Christian Espinoza-Barrios - [Metabolomic Investigation of Soil Fungi in the Search for Gram-Positive & Gram-Negative Antimicrobial Activity](#)

P-010 – Oli Horyn - [Investigating the Molecular Mechanism of Action of Sesquiterpene Lactone Laurenbiolide](#)

Bioinformatics

P-011 – Susan Egbert - [Unlocking the Undiscovered Potential of Lichen-Fungi Metabolites](#)

P-012 – Jason Evans - [NCI Program for Natural Product Discovery: Bioinformatics-Guided Approaches to Natural Product-Based Drug Discovery](#)

P-013 – Camila Manoel Crnkovic - [Developing an Algorithm for Cyanobacterial Biosynthetic Gene Cluster Prioritization](#)

Biological Assays

P-014 – Sang Yoon Choi - [Anti-Oxidative Effect of 6-Shogaol in Muscle Cells](#)

P-015 – Geneive Henry - [DNA Interaction and Cytotoxicity Studies of Synthetic Furanochromene-Quinoline Hybrid Derivatives](#)

Biosynthesis

P-016 – Diana Łomowska -Keehner - [Investigating Streptomyces Eunicellane Biosynthesis through Heterologous Expression](#)

P-017 - Vitor Lourenzon - [Biosynthesis and Biological Functions of Pseudovibriamides Isolated from the Marine Sponge-Associated Bacterium Pseudovibrio Brasiliensis](#)

P-018 – Zacharie Maw - [Discovery, Upregulation, and Synthesis of Cryptic Alubactin A-F using Rhamnolipid's as a Chemical Elicitor on Solid Fermentation of Marine Streptomyces albus RKJM-0023](#)

P-019 - Carla Menegatti - [Isotope-Labeled Monoterpene Reveals Insights into the Biosynthesis of Millipedes Secretions](#)

P-020 – Michael Pasquale - [A Widely Distributed Biosynthetic Cassette is Responsible for Diverse Plant Side Chain Cross-Linked Cyclopeptides](#)

P-021 – Eric Schmidt - [Biosynthesis of Natural Products in Animals](#)

P-022 – Ayoola Smith - [Engineering of new biosynthetic enzymes for ribosomally synthesized and post-translationally modified peptides \(RiPPs\)](#)

P-023 – John Sorensen - [Unlocking the Hidden Biosynthetic Potential of Lichen Fungi](#)

Botanicals

P-024 – Sarah Barr - [Evaluation of Digestive Transformation of Withania somnifera \(Ashwagandha\) Plant Extracts and Bioactive Compounds via UPLC-MS](#)

P-025 – Yuanyuan Ji - [Do Other Hypericum Species are Promising as St. John's Wort \(Hypericum perforatum\)?](#)

P-026 – Yanru Li - [Chemical Profiling and DNA Bar-coding Methods for the Investigation of the Authenticity of Ashwagandha](#)

P-027 – Preston Manwill - [There's Pepper in My Cinnamon: A Case of Contamination While Identifying Potential Herb-Drug Interactions](#)

P-028 – Mirtha Navarro - [USP Botanical Dietary Supplements and Herbal Medicines Pan American Expert Panel: First Anniversary Progress report](#)

P-029 – Ruth Muchiri - [Chemical Standardization of Milk Thistle \(Silybum Marianum\) Using UHPLC-MS/MS: Standard Addition Vs Calibration Curve Quantitation](#)

P-030 – Wilmer Perera - [High-Performance Thin-Layer Chromatography PRO, a Powerful Analytical Tool for the Analysis of Botanicals](#)

P-031 – Jorge Ponce-Zea - [LC-MS/MS Guided Isolation of Quinone Methide Triterpenes from Tripterygium Regelii](#)

P-032 - Zarna Atul Raichura - [Evaluation of Botanical Extracts for Cytochrome P450 Mediated Drug Interactions](#)

P-033 – Rocío Rivera Rodríguez - [Effects of Diterpenes from Salvia Rosmarinus on the Nrf2 Receptor Pathway in Intestinal Models](#)

P-034 - Laxmi Sen Thakuri - [Subcritical Water Extract of Gracilaria chorda Regulates Fat and Glucose Metabolism in Zebrafish Larvae Models](#)

P-035 – Heather Winter - [Antimicrobial Botanical Mechanisms of Action: A Hypericum Calycinum Case Study](#)

Cancer

P-036 – Nathan Ezzone - [Isolation of Cytotoxic Phytochemicals from Aralia Vietnamensis](#)

P-037 – Nathan Ezzone - [Identification and Isolation of Potential Anticancer Agents From a Penicillium sp.](#)

P-038 - Wen-Chi Wei - [The Blockade of Mitogen-Activated Protein Kinase 14 Activation by Marine Natural Product Crassolide Triggers ICD in Tumor Cells and Stimulates Anti-Tumor Immunity](#)

P-039 - Chia-Hung Yen - [Indigofera Suffruticosa and Its Major Compound Tryptanthrin Induce G2/M Arrest Through ATR/CHK1 Pathway in Jurkat Cells](#)

Chemical Ecology

P-040 - Mohammed Ahmed - [Isolation of Metallophore-Producing Bacteria from a Heavy Metal-Toxified Site](#)

P-041 – Margaret Banks - [Ecologically Important Alkaloids from the Millipede Andrognathus Corticarius](#)

P-042 – Stephen Deyrup - [Chemical Defenses of Adult Viburnum Leaf Beetles \(Pyrrhalta viburni\)](#)

P-043 – Carlismari Grundmann - [Porphyrimoids Production as a Response to Pathogen Infection in a Multipartite Symbiosis](#)

P-044 – Jungmoo Huh - [Identification and Biological Activity of a Lasso Peptide from a Pseudonocardia sp. Associated with the Trachymyrmex Septentrionalis Fungus-Growing Ant](#)

Chromatography

P-045 – Mario Augustinovic - [Chromatographic Method Development from Bioassays? Do it in a Flash!](#)

P-046 – Yong Beom Cho - [Molecular Networking-Guided Isolation of Diarylheptanoids from the Rhizomes of Alpinia officinarum](#)

P-047 – William Crandall - [Customizable Large-Scale HPLC Fraction Collection using Low-Cost 3D Printing](#)

Cosmetics

P-048 - Hyeon-Jeong Jeong - [A Combination Extract of Codonopsis pilosula and Trametes versicolor Enhances Autophagy Activation Effects on Human Skin Cells](#)

Drug Discovery

- P-049 – Shugeng Cao - [Chemodiversity, Biosynthesis, and Bioactivity of Hawaiian Fungal Metabolites](#)
- P-050 – Ines Castro-Dionicio - [LC-MS/MS-based Dereplication of Cytotoxic Compounds in Two Extracts from the NCI Natural Products Repository](#)
- P-051 – Isabel Chauvin - [Genetics-Guided Dereplication of Cryptophycin Analogues in Cyanobacteria](#)
- P-052 – Tamam El-Elimat - [A 8,8'-Binaphthopyranone and Xylarenones with Cytotoxic Activity from A Freshwater Fungus \(G708\)](#)
- P-053 – Tamam El-Elimat - [Dihydroquinoline-2-ones, Diketopiperazines, Cyclic Tetra and Pentapeptides, and a Polyketide from an Aspergillus sp. \(MSX25804\): Isolation and Antimalarial Activities](#)
- P-054 - Mary Foglio - [Cytoprotective Effect of Fridericia Chica \(Bonpl.\) L.G.Lohmann Extract Associated with Geranylgeraniol Enriched-Fraction on Epithelial Cells Treated with Bisphosphonate](#)
- P-055 – Kirstie Francis – [Establishing A Marine Microbial Natural Product Drug Discovery Program at Mote Marine Lab](#)
- P-056 – Vitor Freire - [National Cancer Institute Program for Natural Product Discovery: Combining FTIR and High Throughput Screening to Prioritize Chemistry Efforts on Bioactive Fractions](#)
- P-057 – Jiyeon Hwang - [Antiproliferative Fatty Acids with the Rare 1,4-Pentadien-3-ol Scaffold](#)
- P-058 – Shinji Kamisuki - [Pestalotioquinol A, a Novel Fungal Metabolite, Specifically Protects Cells Against Reactive Nitrogen Species and Ameliorates Inflammatory Bowel Disease](#)
- P-059 - Sule Nur Karavus - [Cytotoxic Daucane Esters from the Dichloromethane Extract of the Roots of Endemic Ferula pavidica Akalın & Miski \(Apiaceae\)](#)
- P-060 – Tori Klein - [Pyrrole-imidazole Alkaloids: Elucidating Their Antibiotic Adjuvant Mode of Action](#)
- P-061 – Maciej Korczak - [Urolithin A Conjugates with Non-Steroidal Anti-Inflammatory Drugs: Synthesis, Impact on Phase II Metabolism and Caco-2 Monolayer Integrity](#)
- P-062 - Erin Marshall - [New Drug Leads to Modulate Pain from Arctic Ocean Bacteria](#)

P-063 – Lucero Martinez Fructuoso - [A Screen for New Antimicrobial Natural Products from the NCI Program for Natural Product Discovery Prefractionated Extract Library](#)

P-064 – Olumayokun Olajide - [Natural Product Suppressors of SARS-CoV-2 Cytokine Storm: In Vitro Evidence](#)

P-065 – Herma Pierre - [Verticillin D: Media Studies, Streamlined Purification, and Absolute Configuration](#)

P-066 - Enrique Aguilar Ramírez - [Harnessing the Reactivity of Duclauxin to Obtain hPTP1B1-400 Inhibitors](#)

P-067 – Daniela Rebollar-Ramos - [Antidiabetic potential of a trimeric anthranilic acid peptide isolated from Malbranchea flocciformis](#)

P-068 - Chin Piow Wong - [Anti-Aging Activity of Kaempferia parviflora Extract \(SIRTMAX®\) and its Standardizing Constituent 3,5,7,3',4'-pentamethoxyflavone \(PURESIRTMAX®\)](#)

Genes to Natural Products

P-069 – Chase Clark - [One Graph To Rule Them All: Socialgene Knowledge Graphs Facilitate Real Time Exploration of Chemical, Genetic, and Phylogenetic Space Across Hundreds of Thousands of Genomes](#)

P-070 – Harman Gill - [Bridging the Gap Between Genes and Natural Products: The First Functional Heterologous Expression a Tailoring Gene that Codes for a Decarboxylase from the Lichen Cladonia uncialis](#)

P-071 - Karla Piedl - [Discovery of Lanthipeptide through Genome Mining](#)

P-072 – Conor Pulliam - [Heterologous Expression Facilitates Discovery and Biological Evaluation of a New Group of Non-Ribosomal Peptides](#)

Genomics

P-073 – Daniel Zagal - [Exploring Factors Affecting Microbiome Composition in Dietary Supplement Plants](#)

Human Microbiome

P-074 – Sarah Bonitatibus - [Development of a Feature Prioritization Strategy for Deorphanizing the Human Gut Metabolome in an Inflammatory Bowel Disease Model](#)

P-075 – Jeongho Lee - [Veillonella Parvula, a Member of the Human Commensal Associated with Ulcerative Colitis Produces Inflammatory Peptidolipids](#)

P-076 – Michael Madden - [Outer Membrane Vesicles Deliver Dual Immunomodulatory Sulfonolipids to Regulate Macrophage Immune Response](#)

P-077 – Ethan Older - [Human Gut Microbial Sulfonolipids are linked to Inflammatory Bowel Diseases through Toll-Like Receptor 4 Signaling](#)

P-078 - Hyun Bong Park - [Gut Microbiota-Derived Tryptamine Dimer Is a Natural Agonist for GPR55](#)

Marine

P-079 - Roberto Berlinck - [New Unusual Cytochalasans Produced by a Marine-Derived Fungal Strain, Peroneutypa sp.](#)

P-080 - Sofia Kokkaliari - [Discovery and Characterization of a New TACR2 Antagonist from a Marine Cyanobacterium from Guam](#)

Mass Spectrometry

P-081 – Kabre Heck - [Untargeted Metabolomics Analysis of Euterpe oleracea Mart. and Euterpe precatoria Leads to Potential New Species Marker](#)

P-082 – Quanbo Xiong - [Industrializing Molecular Networking Technology for Large Scale Natural Products Discovery](#)

P-083 – Yi Zhao - [Cardiotoxicity of Diterpenoid Alkaloids from American Aconitum](#)

Medicinal Chemistry

P-084 – Idayat – Akinwumi - [Euphorbia lateriflora: An Excellent source of Diterpenes, Ellagic acid, and Flavonoid derivatives](#)

P-085 - Jose Alberto Gutiérrez- González - [Compounds Isolated From an Organic Extract of Ageratina Grandifolia](#)

P-086 – Madeline Hennessy - [Unlocking the Therapeutic Potential of the Akuamma Alkaloids](#)

P-087 - Omosalewa Olaoluwa - [LC-QTOF-MS Based Metabolomic Identification of New Cytotoxic Compounds from Medicinal Plant Nelsonia canescence](#)

P-088 - Sofia Padilla-Mayne - [Antidiabetic Potential of Compounds from the Aqueous Extract of Stevia serrata](#)

P-089 – Destini Thornton - [Evaluation of Pharmacodynamic Interactions between Açai Extracts and Anticancer Drugs](#)

Microbial

P-090 – Marcio Barczynszyn Weiss - [Dereplication Using Metabolomics Tools for Prioritizing Cyanobacterial Samples for Natural Product Discovery](#)

P-091 - Neha Malhotra - [Co-Cultivation Mediated Elicitation of Fungal Natural Products Against Mycobacterium Tuberculosis](#)

P-092 – Huong Pham - [Bacillus Subtilis Inhibits the Biosynthesis of Verruculogens, the Antifungal Metabolites of Penicillium Brasiliam, Using Its Siderophore Bacillibactin](#)

P-093 – Luis Prieto-Costas - [Exploring Natural products from Puerto Rico: Initial studies of extracts from Arracacia Xanthorrhiza and Chromobacterium violaceum](#)

Microbiology

P-094 - Kh Ahammad Uz Zaman - [Uncommon Pyridiniums and Bacterial EF-G-GDP inhibitory Fusaric Acid Analogs from Hawaii-derived Fungi](#)

Neuroscience

P-095 – Hye Jin Kim - [Cinnamomum Verum-Derived O-Methoxycinnamaldehyde is an Anti-Inflammatory Novel T-lymphocyte NFAT Regulator with Therapeutic Potential in the Context of Depressive Disorder](#)

Pharmacology

P-096 – Manead Khin - [Wheldone, a Fungal Secondary Metabolite Downregulates HNRNPD, a DNA Repair Protein](#)

Plants

P-097 - Md Nure Alam - [Chemical Profiling of Greenhouse Grown Centella Asiatica Cultivars by High Resolution Mass Spectrometry](#)

P-098 - Maricarmen Corona - [Application of Metabolomics and ¹³C-NMR Dereplication Analyses in the Identification of Ceanothane Triterpenes with Antivirulence Activity from Colubrina Yucatanensis](#)

P-099 - Josh Kellogg - [Evaluation of Anti-tuberculosis Phytochemicals from Artemisia spp.](#)

P-100 – Lily Peng - [Edible Fruits as Potential Source for Anticancer Leads](#)

P-101 - Empress Williams - [Exploration of Antimicrobial Compounds from the Medicinal Plant Turnera diffusa](#)

Spectroscopy and Structure Determination

P-102 – Shmuel Carmeli - [Hydanto-anabaenopeptins from Lake Kinneret brown Microcystis bloom Shira Weisthal Algor](#)

P-103 – Hyo-moon Cho - [A Database-Guided Mass Defect and Molecular Networking Approach to Discover New Skeletal Structural Compounds from Nocardia Brasiliensis](#)

P-104 – Winklet Gallimore - [UWI at 75: Seventy five years of Natural Products Chemistry](#)

P-105 - Jaekyeong Kim - [Targeted Isolation of Naphthol Oligomers from an Endolichenic Fungus Daldinia Childiae Guided by LC-HRMS/MS-Based Molecular Networking](#)

P-106 – Haeun Kwon - [Isoprenylated cyclohexanol derivatives from the marine-derived fungus Apiospora piptatheri](#)

P-107 - Hee Ju Lee - [Autophagic Regulation Activity of Benzylisoquinoline Alkaloids Isolated from the Stems of Limacia Scandens](#)

P-108 - Van-Hieu Mai - [Cleistobutone A-D, Four Rare Phloroglucinols from Cleistocalyx Operculatus Buds as Potential Autophagy Regulation](#)

P-109 – Kumudini Meepagala - [A Plant Growth Stimulating Bacterium, and its Metabolites Isolated from Hydrocotyle umbellata \(Dollarweed\)](#)

P-110 - Dong-Chan Oh - [Discovery and Biosynthesis of Cihunamides, Macrocyclic Antibacterial RiPPs with a Unique C-N Linkage Formed by CYP450 Catalysis](#)

P-111 - Maria Orfanoudaki - [Formation of Deutero-Methylated Artifacts of Pyrrole-Containing Natural Products](#)

P-112 – Harinantenaina Rakotondraibe - [LC-MS and Proton NMR Spin Network Fingerprint Databases of Secondary Metabolites for Identification and Standardization of the Botanical Supplement Centella asiatica](#)

P-113 – Guijae Yoo - [Chemical Constituents from the Rhizomes of Alpinia officinarum](#)

P-114 – Korydwen Terrasson - [New and Bioactive Compounds from the Branches of the Vietnam Plant Beilschmiedia Yunnanensis](#)

P-115 – Paulo Vieira - [Exploring Fungal Co-Cultivation to Access Chemical Diversity](#)

Symbionts

P-116 – Kojo Acquah - [Variation in Specialized Metabolite Production by Bacterial Symbionts of the Hawaiian Bobtail Squid upon Challenge via Co-Culture or Unique Elicitors](#)

Synthesis

P-117 - Hadi Pourhadi - [Fluorination of Diepoxin- \$\eta\$: Characterization and Anticancer Activity Evaluation of Semisynthetic Derivatives of Spirobisnaphthalenes](#)

P-117B – Zachary Kohanov - [Current Progress on the Total Synthesis of Thermorubin](#)

ASP Summer Research Fellowship (P-118 – P-126)

P-118 – Selome Banini - [Development of Methods to Produce Novel Semi-Synthetic Norditerpenes to Treat Cryptosporidiosis](#)

P-119 – Aria Gonzalez - [Characterizing the Structure Activity Relationship of Lipids that Induce Cellular Aggregation within Capsaspora owczarzaki](#)

P-120 - Melvin Osei Opoku - [Discovery of Novel Terpenoids from Predicted Terpene Synthases Genes](#)

P-121 - Jorge Hernandez Garcia - [Identifying Novel Chemical Scaffolds from Marine Derived Fungi using Tandem Mass Spectrometry based Molecular Networking](#)

P-122 - Anna Pons - [Biosynthesis of Pseudovibriamides and its Genetic Complementation of a Knock-Out Mutant](#)

P-123 – Roxana Gonzalez - [Synthesis and Antiproliferative Evaluation of Licochalone A-Inspired Chalcones in Cancer Cell Models](#)

P-124 - Ma. Andrea Gatmaitan - [Cockroach-Associated Bacteria and their Antimicrobial Activity](#)

P -125 – Jaclyn Vargas - [Elicitation and Secretion of Specialized Metabolites in Hairy Root Cultures of Annatto \(Bixa orellana\)](#)

P-126 – Lesley-Ann Giddings, Brian Murphy, and Christine Salomon - [Equity in Action: The ASP Summer Research Fellowship Program](#)

ASP Younger Members Committee

P-127 – ASP Younger Members Committee - [Natural Product Careers and Opportunities](#)