

## Poster Session II – Monday July 24, 2023

### Analytical Chemistry

P-128 – Shagufta – Perveen - [A Fast and High-resolution Supercritical Fluid Chromatography Method for the Chiral Separation of Tea Tree Oil Enantiomeric Components](#)

P-129 – Qingxi Su - [Identification of Sweet Modulators from a Botanical Extract by Combination of Sensory Guided-Fractionation and Untargeted Metabolomics Approach](#)

P-130 – Mei Wang - [Quality Evaluation of Peppermint Oils and Commercial Products: An Integrated Approach Using Conventional and Chiral GC/MS Combined with Chemometrics](#)

P-131 – Jianping Zhao - [Chemometrics-aided NMR for Differentiation and Characterization of Peppermint Essential Oil](#)

### Animal Studies

P-132 - Hyo-Jung Kwon - [Protective Effects of Prunella Vulgaris Extract \(HFN2-007\) on Testosterone-Induced Benign Prostatic Hyperplasia in Rats](#)

### Antibiotics

P-133 – Zachary Lane - [Hydroxamic Acids and their Potential Applications as Glycolytic Inhibitors Against Enolase](#)

P-134 – Emily Mevers - [Discovery of a Complex Terpene Produced by Fungus-Growing Ants Bacterial Symbiont](#)

P-135 - Edwin O Chavez Santana - [Identification of Natural Products that Exhibit Antibiotic Activity Against Pseudomonas Aeruginosa](#)

P-136 - Suzzudul Islam Shuvo - [A Semisynthetic Approach of Chloramphenicol Derivatization](#)

### Bioinformatics

P-137 - José D.D. Cediél-Becerra - [PreQ0 Gene Clusters in Streptomyces Reveal an Unexplored Biosynthetic Reservoir](#)

P-138 – Trevor Clark - [Annotation Before Investment: Applying Similarity Network Fusion to Natural Products Discovery](#)

P-139 – Hua Deng - [Apply Machine Learning to Determine Cannabinoids Concentration in Cannabis](#)

## Biological Assays

P-139B – Jiah Kim - [Comparative LC-MS and GC-MS analysis of Metabolites from Medicinal Herb Plants Stem and Root Part Extract](#)

P-140 - Arvie Grace B Masibag - [Membrane Vesicles as Microbial Delivery Systems for Mediating Competition in Pathogen-Probiotic Interactions](#)

P-141 – Dhammika Nanayakkara - [Molluscicidal Activity of Selected Essential Oils against Biomphalaria Havanensis and Planorbella Trivolvis](#)

P-142 - Victor P Ribeiro - [Antifungal and Cytotoxicity Activity of the Main Compounds From Bazilian Red, Green and Brown Propolis](#)

P-142B – Mee-Young Lee - [Anti-inflammatory and Anti-allergic Effects of Cheonwangbosim-dan Wwater Extract: An in vitro and in vivo Study](#)

## Biosynthesis

P-143 – Reema Al-Qiam - [Increased Conversion of Hypocrellins to Hypomyces Under Anaerobic Growth Conditions](#)

P-144 - Tahir Ali - [Identification of Putative Glycosyltransferases from Environmentally Isolated Bacteria Involved in Glycosphingolipids Biosynthesis](#)

P-145 - Elise Ballash - [Genome Mining Unveils Prenylated and Methylated Diketopiperazine Natural Products](#)

P-146 - Keelie S Butler - [Genome Mining Reveals New RiPP Natural Product in Pathogenic Streptococci](#)

P-147 – Ashley Clements - [Bioactivity-Driven Metabologenomics Identifies Biosynthetic Pathway for Stemphones](#)

P-148 – Sajan Green - [Expansion of Natural Product Diversity Through a Novel Diketopiperazine Isomerase](#)

P-149 - Manuel Eduardo Rangel Grimaldo - [Strain heterogeneity of Aspergillus Fischeri with Respect to Gliotoxin Biosynthesis](#)

P-150 – Daniel Icenhour - [Investigating the Biosynthesis of Terpenes in Actinobacteria Using CRISPR-based Gene Editing](#)

P-151 – Sanath Kandy - [Bioinformatic Discovery of a Fused Prenyltransferase-Cyclase Containing RiPP Gene Cluster](#)

## Botanicals

P-152 – Vanderlan Bolzani - [Cytotoxicity Activity of New Circular Miminiproteins from Pombalia Atropurpurea](#)

P-153 - Zoie Bunch - [Metabolomics Studies to Identify Stephania Tetrandra Alkaloids with In Vitro Antiviral Activity Against SARS-CoV-2](#)

P-154 – Angela Calderon - [Sandwich-Cultured Hepatocyte Model to Assess Drug Transporter Induction by Açaí Extracts](#)

P-155 – Serge Fobofou - [Discovering Antiviral Agents from Plant Sources](#)

P-156 - Nora Gray - [Centella Asiatica Administered in the Drinking Water Attenuates Age-Related Changes in Cognition, Anxiety and Sleep-Deprived Cognition More Robustly Than When Administered in the Diet](#)

P-157 - Sophie Fadime S Aydogan - [Novel Triterpenoid Derivatives from Astragalus Strictispinus and Assessment of their Immunostimulatory Activity](#)

P-158 - Sophie Fadime S Aydogan - [Phytochemical and Biological Studies on Teucrium Taxa from Anatolia](#)

P-159 – Chunlin Long - [Dietary flowers as herbal medicine in Yunnan](#)

P-160 – Matthew Menkart - [Inhibition of Cytochrome P450 Isoforms by Ethanolic Extracts of Cinnamomum spp. \(Lauraceae\)](#)

P-161 - Andrés F. Oliveros Diaz - [Bioassay-Guided Fractionation of Larvicidal Colombian Flora Against Aedes aegypti and Its Possible Toxic Effect on Non-Target Organism](#)

P-162 – Evelyn Assis de Andrade - [UPLC-MS/MSe Untargeted Metabolomics Study for Differentiation of Kalanchoe spp. Aqueous Extracts](#)

P-163 – Cuiying Ma - [USP Monograph Methods Differentiate Different Cinnamons](#)

## Cancer

P-164 – Lobna Elsadek - [Grassystatin G, a New Cathepsin D Inhibitor from a Marine Cyanobacterium: Discovery, Synthesis, and Biological Characterization](#)

P-165 - Peter J Blanco Carcache - [Pilot Profiling of Old-World Spice Myristica fragrans Using Molecular Networking and Molecular Docking for Future Cancer Prevention Nanotechnology Application](#)

P-166 – Dayani Sarath Parakumge - [N-Acetyl Balanol: A Balanol Analog from the Fungus \*Cosmospora\* sp. with Potent Protein Kinase A Fusion Inhibitory Activity](#)

P-167 – Ana Ponce - [Identification of Fungal Natural Products that Exhibit Cytotoxic Activity Towards a Brain Cancer \(U87\) Cell Line](#)

### Chemical Ecology

P-168 - Nolan H Barrett - [Probing Ecological Tradeoffs Between Antibiotic Detoxification and Allelopathy in Lake Water Bacteria Using Multi-'Omics Methods](#)

P-169 - Lesley-Ann Giddings - [Isolation and Characterization of a Red-Pigmented \*Massilia\* from an Antarctic Microbial Mat](#)

P-170 – Melany Puglisi - [Understanding the Role of Chemical Mediation of the \*Caulerpa\* spp. Microbiome](#)

P-171 – Samuel Tanoeyadi - [Studies on the Ecological Functions of the Antidiabetic Drugs Acarbose](#)

P-172 – Gabriela Toninato De Paula - [Natural Products from Actinobacteria Associated with the Stingless Bee '\*Tetragona clavipes\*'](#)

### Chromatography

P-173 - In Jin Ha - [A Novel Method for Preparation and Analysis of the 2-Phenoxychromones-Enriched Fraction of \*Artemisia Capillaris\* and Its Anti-Cancer Effect on Colorectal Cancer Cells](#)

P-174 - Yurry Um - [Global Metabolite Profiling of Wild-Simulated Ginseng and Ginseng Based on GC-MS and LC-MS Analyses](#)

P-175 - Yan-Hong Wang - [Characterization of Key Metabolites from \*Eleutherococcus senticosus\* and Ci-wu-ji Tea by UHPLC-UV-QToF MS](#)

### Drug Discovery

P-176 – Esperanza Carcache De Blanco - [Bioassay-Guided Study of \*Pyrenacantha kaurabassana\* from the NCI Natural Products Repository](#)

P-177 – Esperanza Carcache De Blanco - [Bioassay-Guided Study and Molecular Networking of \*Cupressus Arizonica\* from the NCI - NPR](#)

P-177B - Ogechukwu Lucy Chukwuemerie - [Insilico Identification of Antisickling Phytochemicals from \*Justicia Secunda\*](#)

P-178 – Jonathan Jeyaraj - [Molecular Networking Driven Discovery of Potent Cytotoxic Natural Products from \*Aspergillus\* sp. \(\*Trichocomaceae\*\)](#)

- P-179 – Christina Davidson - [Removal of Polyphenols from Plant Extracts to Increase the Drug Discovery Efficiency](#)
- P-180 - T'ea Cameron - [Freshwater Fungi as a Source for Antimicrobial Drug Leads](#)
- P-181 - Manuel Eduardo Rangel Grimaldo - [Improving the production of wheldone, a secondary metabolite produced by a co-culture of Xylaria flabelliformis and Aspergillus fischeri](#)
- P-182 - Thanh-Hau Huynh - [New Macrolides with diverse Starting units from an Insect-associated Kitasatospora sp](#)
- P-183 - Quan T Khong - [Brevianamides A1 and A2: Cytotoxic Oxygenated Diketopiperazines from Penicillium Brevicompactum](#)
- P-184 – Rohitesh Kumar - [A Systematic Approach for the Identification of New Bioactive Compounds from the NCI Natural Product Prefractionated Library](#)
- P-185 – Venkat Macherla - [Anti-Inflammatory Sulfated Withanolide Analogs with Reduced Cytotoxicity from Withania Somnifera](#)
- P-186 - Brian Murphy - [Discovery of New Antibiotic Demethoxytetrone Using Novel Solid Support Assay](#)
- P-187 – Roberta O'Connor - [Mining Natural Products for Activity Against Cryptosporidium and Other Apicomplexan Parasites](#)
- P-188 – Quanbo Xiong - [Rebirthing Industrial Natural Products Discovery Through 21st Century Technology for Infectious Crop Diseases](#)
- P-189 – Andrea Stierle - [Berkeleylactone A, a Potent, Novel Macrolide Antibiotic Produced in Co-Culture by two Extremophilic Fungi Isolated from an Acid Mine Waste Lake in Butte, Montana](#)
- P-190 – Alex Swystun - [Metallophore Production from Deep Arctic Marine Sediment Derived Bacteria Using Single Cell Culturing and High-Throughput Bioassay Methods](#)
- P-191 - Brice Wilson - [Natural Products as a Source of Chemical Diversity in Cyclic-AMP-Dependent Protein Kinase A \(PKA\) Inhibitor Discovery](#)
- P-192 – Priscilla Winder - [Screening the Harbor Branch Oceanographic Institute Enriched Fraction Library for Inhibitors of Survivin](#)
- P-193 - Khaled A Shaaban - [University of Kentucky Natural Product Repository: A Collection of Diverse Microbial Natural Products](#)

P-194 - Natchanun Sirimangkalakitti - [A New Tetracyclic Bromopyrrole-Imidazole Derivative through Direct Chemical Diversification of Substances Present in Natural Product Extract from Marine Sponge Petrosia \(Strongylophora\) sp.](#)

P-195 – Keyara Piri - [Tricyclic Diterpenoids as Potential Androgen Receptor N-Terminal Domain Antagonist](#)

P-196 - Jin Yi Tan - [Partnering with Community Centers to Perform “Environment to Bioassay” Antibiotic Discovery](#)

P-197 - Chris Thornburg - [NCI Program for Natural Product Discovery: Creating a Prefractionated Marine Aqueous Natural Product Library for High-Throughput Screening](#)

### Endophytes

P-198 - Kirk Manfredi - [Endophytes, Caves and Insects: Searching For Fungi that Produce Antimicrobial Metabolites](#)

P-198B - Kamila Tomoko Yuyama - [Discovering the potential of the alkaloids from \*Malouetia tamaquarina\* \(Apocynaceae\) and its endophytes against Neglected Tropical Diseases \(NTDs\)](#)

### Ethnobotany

P-199 – Ella Vardeman - [The Effect of Caribbean Traditional Preparations of \*Argemone mexicana\* L. for Women’s Health on the Vaginal Microbiota](#)

### Genes to Natural Products

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P-201 - Sung Chul Park - [Novel Bioactive Prenylated Phenols Derived from Heterologous Expression of a Pseudozyma qinghaiensis Squalene Synthase Gene in Aspergillus nidulans](#)

P-202 – Rahim Rajwani - [Prediction, detection, and expression of ribosomally synthesized post-translationally modified peptides \(RiPPs\)](#)

P-203 – Kelsey Alexander - [Efficient DNA Extraction Methods of Filamentous Cyanobacteria for Genome Driven Drug Discovery](#)

### Human Microbiome

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P-204B – Sunghee Bang - [Immunogen from Murine Gut Microbiome](#)

P-205 – Alexa Lee - [Identification of Natural Products from Bat-Associated Bacteria to Combat White-Nose Syndrome](#)

P-206 – Maribel Okiye - [Unveiling the Biological Potential of the Human Oral Microbiome](#)

P-207 – Weronika Skowrońska - [Hamamelidis Cortex Reduces the Inflammatory Response of Cells Involved in Wound Healing](#)

P-208 – Caitlin Winner - [Uncovering Small Molecule Crosstalk in the Human Microbiome](#)

## Marine

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P-211 – Mario Augustinovic - [Discovery of New Cyclic Peptides from a Marine Sediment-derived Bacterium](#)

## Mass Spectrometry

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P-213 – Robert Samples - [OpenASAP: an Affordable 3D Printed Atmospheric Solids Analysis Probe \(ASAP\) Mass Spectrometry System for Direct Analysis of Solid and Liquid Samples](#)

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## Medicinal Chemistry

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P-216 - Charmaine Lindsay - [Investigation of Precursor-Derived Secondary Metabolites of Penicillium Arauntiacobrunneum for Potential Cytotoxic Activity](#)

P-217 - Hoan Tam Pham - [Total Synthesis and Biological Evaluation of Lyngbyapeptin A from a Marine Cyanobacterium](#)

P-218 - Yulin Ren - [Glucose Transport Inhibition and Cancer Cell Cytotoxicity of the Fruits of Aronia melanocarpa](#)

P-219 - Yulin Ren - [The Cytotoxic Cardiac Glycoside \(-\)-Cryptanoside A Isolated from the Stems of Cryptolepis dubia Collected in Laos](#)

P-220 - Yulin Ren - [Cytotoxic Leuconoxine-type Diazaspiroindole Alkaloid Isolated from Cryptolepis dubia and Its Analogues](#)

P-221 – Lisa Rusali - [Efforts Toward a Biomimetic Synthesis of the Aristotelia Alkaloids](#)

### Microbial

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P-223 – Nozomi Mosu - [Analysis of Animal-Derived Rare Actinomycetes as a New Source of Bioactive Compounds](#)

P-224 – Dulce Silva - [Coculture of Endophytic Fungi Humicola Fuscoatra and Nemanja Bipapillata Isolated from Marine Red Alga Asparagopsis Taxiformis Triggers Chemodiversity](#)

P-225 - Sean B Romanowski - [Burkholderia Bacterial Host Development Leads to Discovery of a Novel Lipopeptide](#)

### Microbiology

P-226 - Yern-Hyerk Shin - [Revisiting Coley's Toxins: Immunogenic Cardiolipins from Streptococcus Pyogenes](#)

### Neuroscience

P-227 – Swarnali Chatterjee - [Exploring the Neuroprotective Potential of Selected Dietary Soft Electrophiles](#)

P-228 – Perihan Gurbuz - [Screening of Selected Phenolic Compounds for BBB Specific Artificial Membrane Permeability Capabilities and Neuroprotective Effects Via In Vitro GSK-3 \$\beta\$ , CK-1 \$\delta\$ , and AChE Inhibition](#)

### Pharmacology

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P-230 - Ju-Hye Yang - [Indigo Pulverata Levis Alleviates Inflammatory Responses in DNCB-Induced Atopic Dermatitis-Like Mice Model](#)

### Plants

P-231 – Tamam El-Elimat - [Homoisoflavonoids with Cytotoxic Activity from the Bulbs of Bellevalia Desertorum](#)

P-232 – Tamam El-Elimat - [Cytotoxic Colchicinoids from \*Colchicum tuviae\* Feinbrun \(Colchicaceae\)](#)

P-233 – Kyungha Lee - [A Systemic Analysis on the Chemical Diversity of Monoterpene Indole Alkaloids in 275 Species of Apocynaceae, Loganiaceae, and Rubiaceae](#)

P-234 - Fatimah Ibrahim Qassadi - [Extraction, Evaluation and Identification of Bioactive Products from Natural Plant Based Extracts: Antimicrobial Activities and Phytochemical Characterization](#)

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P-237 – Cody Earp - [Use of Biosynthetic Gene Clusters and Biochemometrics to Identify Stemphone Analogues](#)

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P-239 – Sangwook Kang - [Epoxinamide: An Epoxy Cinnamoyl-Containing Nonribosomal Peptide from an Intertidal Mudflat-Derived \*Streptomyces\* sp.](#)

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P-241 - Byung Sun Min - [Anti-Inflammatory Lignans from the Roots of \*Asarum Heterotropoides\* var. \*Mandshuricum\*](#)

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P-245 - Ermias Mekuria Addo - [Dereplication and Isolation of Secondary Metabolites from the Two Selected Lichens \*Mobergia Calculiformis\* and \*Niebla Josecuervoii\*](#)

P-246 - So-Ri Son - [Unusual Anti-Oxidative Meroterpenoids from the Roots of \*Patrinia Scabra\*](#)

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P-250 – Weimao Zhong - [LCMS-guided Discovery, Structural Characterization, and Biosynthesis of Ureido Peptidic Natural Products from Marine Microbulbifer spp. Bacteria](#)

P-250B – Yurui Xie - [Two New Phenolic Glycosides from Paris Polyphylla Var. Yunnanensis](#)

### Symbionts

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### Synthesis

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### Microbiology

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