



Detailed Program

Sunday, September 1, 2019

15:00 – 17:30 *Registration of participants*

17:00 – 17:30 **Opening Ceremony**

17:30 – 19:00 **Opening Lectures**

KS1: William Fenical :: University of California San Diego

Exploiting Where Chemistry and Biology Collide

KS2: Vassilios Roussis :: National and Kapodistrian University of Athens

The Big Ones Revisited: Marine Biopolymers for Biomedical Applications

19:00 *Welcome Reception*

Monday, September 2, 2019

09:00 – 12:30 **Session1. Chemical Ecology and Ecosystem Functioning**
Chairwoman | Gabriele M. König

09:00 – 09:45 **PL1. Eric Schmidt** :: University of Utah

Biosynthesis and Ecology of Metabolites in the Marine Mollusks

09:45 – 10:00 **OC1. Peter J. Schupp** :: Carl-von-Ossietzky University

Exploration of Deep-Water Sponges Yields new Sponge Species, Novel Microbiomes and Potentially New Bioactive Compounds

10:00 – 10:15 **OC2. Deniz Tasdemir** :: GEOMAR

Mapping Seaweed and Seagrass Surfaces by Untargeted Metabolomics and DESI-Mass Spectrometry Imaging Integrated with Microbiome and Bioassay Studies

10:15 – 10:30 **OC3. Alejandra Prieto-Davó** :: Universidad Nacional Autónoma de México

Interdisciplinary Approach to Study the Biotechnological Potential of Microbial Communities from Mangrove Sediments in Sisal, Yucatan, Mexico

10:30 – 11:00 *Coffee break*

11:00 – 11:15 **OC4. Nicole Avalon** :: University of South Florida

Establishment of the Core Microbiome of the Ascidian *Synoicum adareanum* near Palmer Station, Antarctica

11:15 – 11:30 **OC5. Marine Vallet** :: Max Planck Institute

Natural Products Involved in Parasite-Micro Algae Interactions

11:30 – 11:45 **OC6. Alexander Bogdanov** :: University of Bonn

The *Phyllidiella pustulosa* Species Complex (Gastropoda, Nudibranchia): Do Secondary



Metabolites Aid in Species Delimitation?

- 11:45 – 12:30** **PL2. Georg Pohnert** :: Friedrich Schiller University
Exploration of Chemical Signals from Marine Microalgae that Structure the Marine Environment
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- 12:30 – 14:00** *Lunch*
- 15:00 – 19:00** **Session 2. Isolation and Structure Elucidation of Marine Natural Products**
Chairwoman | RuAngelie Edrada-Ebel
- 14:00 – 14:45** **PL3. Jon Clardy** :: Harvard Medical School
Elusive Microbial Metabolites
- 14:45 – 15:00** **OC7. Tadeusz F. Molinski** :: University of California San Diego
Marine Natural Products from Invertebrates. “Necessity is the Mother of Invention”
- 15:00 – 15:15** **OC8. William Gerwick** :: University of California San Diego
Tutuilmides A-C: Vinyl-Chloride Containing Cyclodepsipeptides from Two Marine Cyanobacteria
- 15:15 – 15:30** **OC9. Robert Keyzers** :: Victoria University of Wellington
Chemical Investigation of Tongan Invertebrates
- 15:30 – 15:45** **OC10. Dehai Li** :: Ocean University of China
Bioactive Secondary Metabolites from Deep-Sea Derived Microorganisms, Discovery and Extending
- 15:45 – 16:15** *Coffee break*
- 16:15 – 16:30** **OC11. Louise Forster** :: University of Queensland
Inconspicuous Carbon NMR Signals and Fluxional Effects Complicate the Structural Elucidation of Noriterpenes from *Goniobranthus coi*
- 16:30 – 16:45** **OC12. Kevin Calabro** :: National University of Ireland Galway
Marine Polychaetes as an Untapped Source of Chemical Diversity: Case Study of the Irish Intertidal Terebellid *Eupolymnia Nebulosa*
- 16:45 – 17:30** **PL4. Angelo Fontana** :: Consiglio Nazionale delle Ricerche (BOCU)
Natural Products of Marine Protists – from Basic Research to Novel Immunomodulatory Agents
- 17:30 – 19:00** **Poster session** :: **Scientific Themes 1 and 2 | TASC MAR Workshop**

Tuesday, September 3, 2019

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- 09:00 – 17:00** **Cultural Day** :: **Tour 1 or Tour 2**



Wednesday, September 4, 2019

09:00 – 12:30 Session3. Drug Discovery and Development

Chairwoman | Carmen Cuevas

09:00 – 09:45 PL5. José María Fernández :: PharmaMar

Nobody is a Prophet in His Own Land. The Aplidin® Story

09:45 – 10:00 OC13. Ronald J. Quinn :: Griffith University

Pheno-Target Screening: Combining Cell Assays and Target Identification

10:00 – 10:15 OC14. Daniela B. B. Trivella :: Brazilian Center for Research in Energy and Materials (CNPEM)

NP³ Platform: Combined Protein Crystallography and MS-Based Metabolomics to Empower Natural Product Drug Discovery

10:15 – 10:30 OC15. Hosana M. Deboni :: University of São Paulo

Antiparasitic Metabolites Isolated from the Antarctic Algae-Associated Fungus: *Penicillium echinulatum*

10:30 – 11:00 Coffee break

11:00 – 11:15 OC16. Nuna Araújo :: CCMAR | University of Algarve

Amentadione, a Meroditerpenoide from Brown Algae with Capacity of Modulating Osteoarthritic Responses, in a Close-to-In-Vivo OA Model

11:15 – 11:30 OC17. Brian T. Murphy :: University of Illinois at Chicago

A New Paradigm to Maximize Taxonomic and Natural Product Space in Microbial Libraries

11:30 – 11:45 OC18. Paula C. Jimenez :: Universidade Federal de São Paulo

A Target-Oriented Approach for Bioprospecting IAP Modulators in Extracts from Marine Bacteria

11:45 – 12:30 PL6. Guy T. Carter :: Biosortia Pharmaceuticals, Inc.

Mega-Metabolomic Exploration of Aquatic Microbiomes for Drug Discovery

12:30 – 14:00 Lunch

15:00 – 19:00 Session 4. Biosynthesis of Marine Natural Products

Chairman | Matthew Crump

14:00 – 14:45 PL7. Bradley S. Moore :: University of California San Diego

Emerging Platforms and Opportunities in Marine Natural Product Biosynthesis

14:45 – 15:00 OC19. David P. Fewer :: University of Helsinki

Comparative Genomics Unravels Cryptic Diversity in the Cyanobactin Biosynthetic



Pathway

- 15:00 – 15:15** **OC20. Franziska Hemmerling** :: Swiss Federal Institute of Technology (ETH)
Single-Bacterial Genomics, Raman Spectroscopy, and Biochemical Studies Identify Metabolic Functions of Uncultivated Marine Microbiota
- 15:15 – 15:30** **OC21. Matthew Crump** :: University of Bristol
Nuclear Magnetic Resonance, Mass Spectrometry and Chemical Probes in Natural Product Biosynthesis.
- 15:30 – 15:45** **OC22. Chris Willis** :: *University of Bristol*
A Symbiosis of Synthesis and Synthetic Biology in the Elucidation of Polyketide Biosynthesis
- 15:45 – 16:15** *Coffee break*
- 16:15 – 16:30** **OC23. Laurence Maschio** :: University of Bristol
Structural and Functional Dissection of an Enzymatic Natural Product Assembly Line
- 16:30 – 16:45** **OC24. Jia Jia Zhang** :: University of California San Diego
Avant-Garde Assembly-Line Biosynthesis Expands Diversity of Cyclic Lipodepsipeptide Products
- 16:45 – 17:30** **PL8. Pedro N. Leão** :: CIIMAR | University of Porto
Fatty Acid Incorporation into Cyanobacterial Secondary Metabolites
- 17:30 – 19:00** **Poster session :: Scientific Themes 3 and 4**
- 19:00** *Gala Dinner*

Thursday, September 5, 2019

- 09:00 – 12:30** **Session 5. Synthesis of Marine Natural Products and Medicinal Chemistry**
Chairman | Daniel Romo
- 09:00 – 09:45** **PL9. Emmanuel A. Theodorakis** :: University of California San Diego
Synthetic Strategies Toward Spirotetronate polyketides
- 09:45 – 10:00** **OC25. Thomas Lindel** :: TU Braunschweig, Institute of Organic Chemistry
Biomimetic Photooxidation of the Macrocyclic Core of Salarin C from the Sponge *Fascaplysinopsis* sp.
- 10:00 – 10:15** **OC26. Yusuf A. Adegoke** :: University of the Western Cape
Antiproliferative Effect of Prenylated Diketopiperazine and Barbituric Acid Derivatives Against Triple Negative Breast Cancer



- 10:15 – 10:30** **OC27. Matthias Köck** :: Alfred-Wegener-Institut für Polar- und Meeresforschung in der Helmholtz-Gemeinschaft

The Advanced Floating Chirality Distance Geometry Approach – How Anisotropic NMR Parameters Can Support the Determination of the Relative Configuration of Natural Products
- 10:30 – 11:00** *Coffee break*
- 11:00 – 11:15** **OC28. Ethan Woolly** :: Victoria University of Wellington

Designing New Agents for the Peloruside Binding Site
- 11:15 – 11:30** **OC29. Efstathia Ioannou** :: National and Kapodistrian University of Athens

Bioactive Metabolites from an Actinobacterial Strain *Streptomyces smyrnaeus*
- 11:30 – 11:45** **OC30. C. Benjamin Naman** :: Ningbo University

Discovery, Synthesis, and Biological Activity of New Cyanobacterial Natural Products from the South China Sea
- 11:45 – 12:30** **PL10. Tobias A. M. Gulder** :: Technical University of Dresden

Biocatalytic Total Synthesis of Complex Marine Microbial Metabolites
- 12:30 – 14:00** *Lunch*
- 15:00 – 19:00** **Session 6. Marine Natural Products Chemical Biology and Biotechnology**
Chairman | Norberto P. Lopes
- 14:00 – 14:45** **PL11. Leticia V. Costa-Lotufo** :: Instituto de Ciências Biomédicas, USP

Targeting Cancer Relevant Proteins with Marine Natural Products
- 14:45 – 15:00** **OC31. Katherine R. Duncan** :: University of Aberdeen

Defining Patterns in Chemical and Genomic Space to Prioritise Antibiotic Discovery from Actinobacteria
- 15:00 – 15:15** **OC32. Jackson K.B. Cahn** :: Eidgenössische Technische Hochschule (ETH)

The Evolutionary Profile of a Superproducer Sponge Symbiont, *Candidatus "Entheonella"*
- 15:15 – 15:30** **OC33. Elena Bovio** :: DBIOS University of Turin

Marine Fungi from Sponges: Biodiversity, Chemodiversity and Biotechnological Applications
- 15:30 – 15:45** **OC34. Sophia Letsiou** :: APIVITA , SA

Marine Derived Molecules and Their Potential Use in Cosmeceutical and Cosmetic Products
- 15:45 – 16:15** *Coffee break*



- 16:15 – 16:30** **OC35. Joel S. García-Romo** :: University of Sonora
In Vitro Bioactive Potential and Identification of Molecules Isolated from the Muscle of Farmed (*Litopenaeus vannamei*) and Wild (*Litopenaeus stylirostris*) Shrimp: Anti-proliferative / Pro-apoptosis Activity and Protection Against Oxidative Cellular Damage/Injury
- 16:30 – 16:45** **OC36. Olesya Malyarenko** :: Russian Academy of Sciences
Radiosensitization of Malignant Cancer Cells by Polysaccharides from Brown Seaweed *Fucus evanescens*
- 16:45 – 17:30** **PL12. Jaclyn M. Winter** :: University of Utah College of Pharmacy
Exploring the Chemical Potential of Great Salt Lake Microorganisms
- 17:30 – 19:00** **Poster session :: Scientific Themes 5 and 6**
- 19:00 – 21:00** *Sunset Party*