# I International Summer School on Natural Products "Luigi Minale" and "Ernesto Fattorusso"

## Naples, July 6-10, 2015

# Stazione Zoologica "Anton Dohrn"

## PROGRAMME

## **Organizing Commitee**

Valeria Costantino Department of Pharmacy University of Naples"Federico II" Via D. Montesano, 49 - 80131 Naples Tel 081678504 - Fax 081678522; E-mail: <u>valeria.costantino@unina.it</u>

#### Monday, 6

## TARGET ORIENTED DISCOVERY Morning session

8:30-10:00 Registration, Stazione Zoologica "Anton Dohrn"

## 9:00 **Opening session**

- 10:00 **Patrizia Ciminiello** Ernesto Fattorusso: a magic way of merging humanity and science in a wonderful piece of art
- 10:30 L1: Maria Valeria D'Auria, University of Naples Federico II, Italy Targeting Nuclear Receptors For The Treatment Of Metabolic And Inflammatory Diseases: A Lesson From Nature
- 11:15 **L2: Rosa Lanzetta**, *University of Naples Federico II, Italy* How To Unravel The Complex Carbohydrate Structures And....Why
- 12:00 Lunch

## **Afternoon Session**

- 14:00 **PL1: Giuseppe Astarita**, *Georgetown University, Washington, DC- USA* Emerging Metabolomics And Lipidomics Approaches
- 15:00 L3: Andrea Scaloni, *ISPAAM Institute CNR, Italy*Quantitative Proteomics To Evaluate The Effect Of Natural Products On Biological Systems
- 16:00 **L4: Agostino Casapullo,** *University of Salerno, Italy* Chemical Proteomics: A Powerful Tool For Target Discovery Of Bioactive Molecules

## 17:00 Communications and Open discussion

**C1: Genoveffa Nuzzo,** *Institute of Biomolecular Chemistry, Italy* Studies On Bioactive Metabolites From Protists Of Mediterranean Area

C2: Luana Riccobono, University of Palermo, Italy

Chemical Composition And Potential Biological Activity Of Tetraclinis Articulata (Vahl) Mast. Growing In Tunisia

**C3: Catarina Vizetto-Duarte,** *University of Algarve, Portugal* Potential Pharmaceutical Use Of *Cystoseira* Species: Insights Into The Mechanism Of Action

## Tuesday, 7

# FROM NATURE TO THE BOX

# Morning session

- 9:00 **PL2: Stéphane Quideau**, *University of Bordeaux I, France* Gallic Acid-Derived Polyphenols - From The Plant To The Cell Under The Auspices Of Dionysos
- 10:00 **L5: Fabrizio Giordanetto**, *Taros Chemicals GmbH& Co. Germany* Approximation Of Natural Products To Design Compound Libraries For High Throughput Screening
- 11:00 **L6: Alessandra Napolitano**, *University of Naples Federico II, Italy* Natural And Bioinspired Polyphenols With Antioxidant Properties For Health And Food Applications
- 12:00 Lunch

## NUTRACEUTICAL Afternoon Session

- 14:00 **PL3: Giovanni Appendino**, *University of Eastern Piedmont, Italy* Complexity Can Be Beautiful, But Simplicity Works Better. Getting Confused Ideas And Nebulous Concepts Out Of Nutraceutical Research.
- 15:00 **L7: Gian Carlo Tenore**, *University of Naples Federico II, Italy* Mediterranean Functional Foods As Sources Of Nutraceuticals
- 16:00 **L8: Alessandra Storzini**, *Indena S.p.a, Italy* Health Claims: A European Perspective

## 17:00 Communications and Open discussion

**C4: Carmen Festa,** *University of Naples Federico II, Italy* Discovery of Amine Bile Acid Derivatives as Selective Agonists of Cell-surface G-protein Coupled Bile Acid Receptor 1

**C5: Cristina Marucci,** *University of Milan, Italy* Nature Suggested Hybrid Compounds As New Tubulin Binders

**C6: Mariana Alves Reis,** *University of Lisbon, Portugal* Tackling Multidrug Resistance in Cancer

**C7: Andreia Marina Oliveira Mónico,** *University of Lisbon, Portugal* Molecular Derivatization Of Lathyrane Diterpenes From *Euphorbia Boetica* 

## **18:00** Wine and Cheese

#### Wednesday, 8

## GENOMICS AND BIOSYNTHESIS Morning session

9:00 **L9: Alfonso Mangoni**, *University of Naples Federico II, Italy* An Introduction To The Biosynthesis Of Polyketides And Non-Ribosomal Peptides

#### 10:00 PL4: William H. Gerwick, UC San Diego, USA

Discovery And Biosynthesis Of Biologically Active Marine Cyanobacterial Natural Products Using Genomic Methods

- 11:00 **L10: Angelo Fontana**, *Institute of Biomolecular Chemistry, Italy* What Do We Really Know About The Biosynthesis In Marine Eukaryotes? Lesson From Opisthobranchs And Microalgae
- 12:00 Lunch

## 13:30-16:30 Poster session and coffee

14:30 Alfonso Mangoni, *University of Naples Federico II, Italy* Farmabionet, The Campania Network For Biotechnology Applied To Pharmacologically Active Compounds

#### 15:30 Communications and Open discussion

**C8:** Cristina-Nicoleta Alexandru-Crivac, University of Aberdeen, Scotland Exploring RiPP Biosynthetic Pathways in a Quest for a Novel Macrocyclase with Improved Catalytic Properties

**C9: Sara Freitas,** *University of Porto, Portugal* Mechanisms Involved In The Cytotoxicity Of Marine Picocyanobacteria Strains Against The RKO Colon Adenocarcinoma Cell Line

**C10: Roberta Teta,** *University of Naples Federico II, Italy* Novel Metabolites From Microorganisms Using Molecular Networking

16:30 Tour - Visit to the Aquarium of the Zoological Station "Anton Dohrn"17.30 Tour - Discovering Napoli...underground: Tunnel Borbonico

## Thursday, 9

## HORIZON 2020 Morning session

- 9:00 PL5: Valter Pagani, CEERNT-EUC Group, Belgium
  - Marie S. Curie Actions An Opportunity Of Excellence For European Researchers
- 10:00 **L11: Marina Mauro**, *Murgitroyd & Co., Italy* Brief Introduction To Patents
- 11:00 Practical session
- 12:00 Lunch

#### CHEMICAL ECOLOGY Afternoon Session

- 14:00 **PL6: Conxita Avila Escartin**, *University of Barcellona, Spain* How To Survive In The Cold: Chemical Ecology In Antarctica
- 14:50 **PL7: Peter Schupp**, *University of Oldenburg, Germany* Role Of Marine Natural Products During Invertebrate Settlement: Examples From Scleractinian Coral Reproduction
- 15:40 **L12: Raffaella Casotti**, *Anton Dohrn Zoological Station, Italy* The Ecological Role Of Natural Products From The Marine Plankton
- 16:30 **L13: Ernesto Mollo**, *Institute of Biomolecular Chemistry, Italy* Marine Natural Products As Warning Signals

## 17:00 Communications and Open discussion

#### C11: Kumar Saurav, University of Haifa, Israel

Quorum Sensing And Its Inhibitors Co-Existence In Mediterranean And Red Sea Sponges And Their Potential For Anti Virulence Therapy

**C12: Juan Moles,** *University of Barcelona, Spain* Anti-Predatory Chemical Defences In Antarctic Benthic Fauna

## 18.30 Guided walk-tour by "Lo Spazio" from P.zza Plebiscito to Spaccanapoli

## **19:00 – 21:30 Social Happy Hour**

Friday, 10	
Morning session	
9:00	L14: Marialuisa Menna, University of Naples Federico II, Italy Exploring 3D Shapes Of The Molecules: The Great Endeavour In Natural Products Research
10:00	Communications and Open discussion
	<ul> <li>C13: Nunzio Cardullo, University of Catania, Italy</li> <li>Biomimetic Synthesis And Biological Evaluation Of New Natural-Related Neolignanamides</li> <li>C14: Lucia Ferrazzano, University of Bologna, Italy</li> <li>Design And Synthesis Of Integrin Ligands As "Molecular Shuttles" For Drug And Fluorescent Molecules Delivery</li> </ul>

**C15: Angela Paterna**, *University of Lisbon, Portugal* Apoptosis Inducing Activity Of A Small Library Of Monoterpene Indole Alkaloids In Human Colon (HCT116) And Liver (Hepg2) Carcinoma Cells

**C16: Catarina Alexandra Guerreiro Pereira**, *University of Algarve, Portugal Plantago Coronopus*: Phytochemical Profile And Antioxidant Potential Of A Medicinal Edible Halophyte

**C17: Brunella Pinto,** *University of Naples Federico II, Italy* Synthesis Of A Novel Cadpr Derivative Modified At The Base And Pyrophosphate Bridge

**C18: Maria João Rodrigues**, *University of Algarve, Portugal* Juncunol: A Cytotoxic Drug Isolated From *Juncus Acutus* 

12:00 Conclusions and Remarks