

Workshop: Advanced technologies for Bioactivity screening of compounds in natural products

Dept. Molecular Biology and Genetics, Alexandroupolis, Greece

Monday, 29/05/2023

9.45

Welcome

10.00 – 10:15

Brief introduction of the 'BioActiveScreen' research project supported by the Hellenic Foundation for Research and Innovation (HFRI)

Katerina Chlichlia, Professor

10:15 – 10:30

Evaluation of biological activity and target identification of bioactive natural products - Networking with OPENSREEN-GR (node DUTH)

Aglaiia Pappa, Professor

10:30 – 11:00

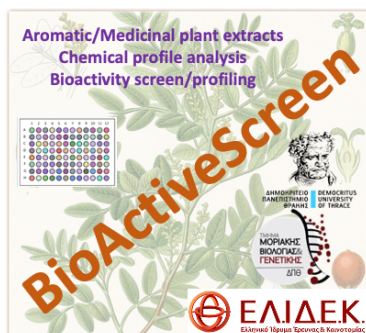
Isothiocyanates as naturally-derived bioactive compounds: Does 'one size fits all'?

Mihalis Panagiotidis, Professor, Department Head, Cyprus Institute of Neurology and Genetics

11:00 – 11:30

Identification of bioactive compounds: *in vitro* and *in vivo* platforms for evaluation

Georgios Aindelis, Postdoctoral researcher



11:30 – 12:00

Coffee Break

12:00 – 14:00

Identification of bioactive compounds: *in vitro* assays and technologies:

1. Study of the effect of bioactive compounds on bacteria and eukaryotic cells using RT-qPCR and Western blot

Despoina-Evgenia Kioussi, PhD student

2. Investigation of antibiofilm effects of novel bioactive compounds

Eleni Tryfonopoulou, PhD student

3. Flow cytometry and spectrophotometric assays for bioactivity analysis

Katerina Spyridopoulou, Postdoctoral researcher

4. In vitro methodology for exploring the antioxidant and genoprotective properties of bioactive compounds

Georgia-Persephoni Voulgaridou, Postdoctoral researcher

5. The example of *Pistacia lentiscus var chia*

Katerina Spyridopoulou, Postdoctoral researcher

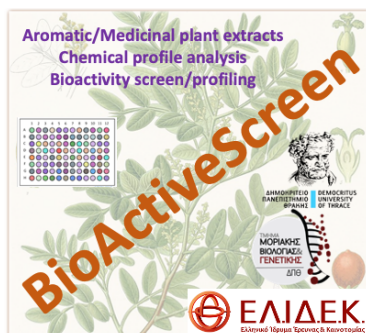
14:00 – 15:00

Lunch break

15:00 – 16:00

Spectral Flow Cytometry: the Bigfoot spectral cell sorter

Georgios Lallas, Antisel



16:00 – 17:00

High-Content Screening Platform - Cellinsight (virtual)

Mikhail Okun, HCS Application specialist

Tuesday, 30/05/2023 (Hands-on training)

10:00 – 13:00 (Group A)

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14:00 – 17:00 (Group B)

Flow cytometry: Apoptosis and Cell cycle analysis

K. Spyridopoulou & G. Aindelis

10:00 – 13:00 (Group B)

&

14:00 – 17:00 (Group A)

Antioxidant activity assays - Cell mass and viability colorimetric assays

G.-P. Voulgaridou, D.-E. Kiousi, E. Tryfonopoulou

13:00 - 14:00

Lunch break

17.00 – 17.30

Concluding remarks