This course will provide a basic introduction into the rapidly emerging field of metabolomics and its importance in Natural Products research; it is a complementary activity of the I Euroindoamerican Natural Products Meeting

May, Sunday 27-Monday 28, 2018. Date:

Location: This course will be held at the Institute of Agricultural Sciences (CSIC)

and at Spanish Cultural Heritage Institute, Madrid.

Objetives:

To comprehend the purpose and importance of the field of metabolomics.

To discuss some of the modern-day applications of metabolomics.

To evaluate advantages and limitations of some analytical techniques used in metabolomics studies.

Audience: This is course is intended for graduate students, postdocs and young researchers working in Natural Products.

Language: The course will be taught in English.

Using the course as a discipline for graduate students:

Graduate students may enroll in the course and use it as an official discipline (2 credits). In this case, an official enrollment is required instructions will be sent upon acceptance) and an evaluation test with be carried out at the end of the course.

Coordinators: Dra. Maria Fe Andres ICA-CSIC, Madrid (España), Maria Bailén, Universidad Europea de Madrid (España); Dr. Gustavo Zúñiga, Universidad Santiago de Chile (Chile); Dr. Fernando Echeverri, Universidad de Antioquia, Medellín (Colombia).





















WORKSHOP

"METABOLOMICS AND NATURAL PRODUCTS"

May, Sunday 27-Monday 28, 2018

I EIAMNP

Furoindoamerican Natural Products Meeting

www.eiamnp2018.com



Institute of Agricultural Sciences, CSIC, Madrid









Sunday 27th May

9:00 - 9:30	Reception and course material delivery
9:30-10:00	C. Bertrand . Introduction to Metabolomics. Module 1: C. Bertrand Metabolomics as a tool for discovery and application in plant Health. Practical approaches
11:00-11:30	Break time
11:30-12:30 11:30-12:45	Modules 2: P. Caboni Metabolomics and natural toxicants Practical approaches
12:45 -14:00	Lunch
14:00 -15:00 15:00-16:00	Module 3: G. Zuñiga Metabolomics and plant biotechnology. Practical approaches
16:00-16:30	Break time
16:30-17:30 17:30-18:30	Module 4: N. Kaushik Metabolomics and traditional medicinal plants Practical approaches

Monday 28th May

8:30 - 8:50 9:00 - 9:30 9:30 - 10:30 10:30 - 11:00	Reception and acreditation IPCE: Opening Session. María Domingo Fominaya. General sub-director. Module 5: M. L. Sanz and A. C. Soria Analytical Techniques for Plant Metabolomics Practical approaches
11:00 -11:30	Break time
11:30 - 12:30 12:30 -13:30 13:30 -14:00	IPCE Tour Module 6: M A. Sanz and P. Marco Metabolomics and food quality Practical approaches
14:00 -15:00	Lunch
15:00 -16:00 16:00 -17:00	Module 7: J.C. Morales Tools used in Metabolomic Analysis Module 8: M. Chagoyen Data-processing strategies for metabolomics studies
17:00-17:30	Closing Remarks

LECTURERS

Prof. CEDRIC BERTRAND. Faculty of Exact and Experimental Sciences. Université de Perpignan. France. Expert on phytochemistry and metabolomics, development of analytical methods for the analysis of complex matrices of natural origin.

Prof. GUSTAVO ZUÑIGA. Facultad de Química y Biologia. Universidad Santiago de Chile. Chile. Expert on the development of methodologies for in vitro plant culture to obtain natural products with biological activity.

Prof. PIERLUIGI CABONI. Department of Life and Environmental Sciences Università degli studi di Cagliari. Italy.

Expert on the development and applications of methods for metabolites identification and quantification by mass spectrometry.

Dra. NUTAN KAUSHIK. Food & Agriculture Foundation. Amity University Uttar Pradesh. India. Expert on development of new process and applications for plant and microbial metabolites analysis.

Dra. MARIA LUZ SANZ. Instituto de Química Organica. CSIC. Madrid. Spain.

Expert on the development of new methods based on chromatographic techniques coupled to mass spectrometry for the analysis of complex mixtures of bioactive compounds in food, plants and soils.

Dra. ANA CRISTINA SORIA. Instituto de Química Orgánica. CSIC. Madrid. Spain.

Expert on the development of new methods based on chromatographic techniques coupled to mass spectrometry for the analysis of complex mixtures of bioactive compounds in food, plants and soils.

Dra. MARIA ANGELES SANZ. Centro de Investigación y Tecnología Agroalimentaria de Aragón. Zaragoza. Spain.

Expert on the development of analytical methods for biomarker identification in food products and processes.

Dr. PEDRO MARCO MONTORI. Centro de Investigación y Tecnologia Agroalimentaria de Aragón. Zaragoza. Spain.

Expert in postharvest treatments and sensory analysis of truffles.

Dr. JAUME C. MORALES. Agilent Technologies Spain S.L.

MS Product Specialist.

Dra. MONICA CHAGOYEN. Centro Nacional de Biotecnologia (CNB-CSIC).

Expert on the development of computational methods and tools in the areas: Functional bioinformatics, Integrated data analysis and Biological data management.