

Module Information

2022.01, Approved

Summary Information

Module Code	7126PHASCI
Formal Module Title	Natural Products Pharmacology and Toxicology
Owning School	Pharmacy & Biomolecular Sciences
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	12
Workshop	6

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	This module aims to cover the biochemical and medical (pharmacological and toxicological) aspects of natural products. The theoretical Lectures will offer an overview of the major: (1) therapeutical applications of natural products to communicable (antibacterial, antiviral, antiparasitic) and non-communicable diseases (anticancer, neuroprotection, antioxidants); (2) Traditional medicinal systems currently available; (3) toxicological aspects of natural products.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Independently acquire specialised, advanced knowledge and understanding of the application of biological approaches to investigate and predict pharmacological and toxicological properties of natural products.
MLO2	2	Ethically source, systematically locate, critically evaluate, objectively assess and make appropriate use of information from scientific literature and relevant electronic resources on the medicinal use and biological effects of natural products.
MLO3	3	Demonstrate the necessary skills to plan, perform, report and interpret the results of laboratory experiments and analyses applied to the pharmacology and toxicology of natural products.
MLO4	4	Demonstrate advanced understanding of the basis and major contributions to health of the most important Traditional Medicinal Systems currently in use.

Module Content

Outline Syllabus	1. Traditional Chinese Medicine 2. Ayurveda 3. Western Phytotherapy 4. Anticancer Natural Products 5. Antibacterial and antiparasitic Natural Products 6. Neuroprotective Natural Products 7. Nutraceuticals 8. Regulatory Aspects of Natural Products 9. Biological Implications of Antioxidants 10. Bioassays design 11. Natural Products Toxicology.
Module Overview	This module covers traditional medicine, sources of natural antibiotics, anti-inflammatory, anti-cancer, antimalarial and antioxidants compounds.
Additional Information	This module aims to cover the biochemical and medical (traditional, pharmacological and toxicological) aspects of natural products. It will build upon the candidate's previous knowledge acquired in undergraduate and/or postgraduate studies on biology, pharmacology and toxicology.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Centralised Exam	Exam	60	2	MLO1, MLO4
Report	Report	40	0	MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Amos Fatokun	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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