

Cancer Therapeutics Research Project

Module Code:	INC7019-E
Academic Year:	2018-19
Credit Rating:	60
School:	School of Pharmacy and Medical Sciences
Subject Area:	Cancer Therapeutics
FHEQ Level:	FHEQ Level 7 (Masters)

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	3
Tutorials	12
Laboratory	300
Directed Study	285

Availability Periods

Occurrence	Location/Period
BDA	University of Bradford / Semester 3 (June - Oct)

Module Aims

To provide the opportunity for students to:

- Develop self-direction and originality in the application of knowledge and problem solving.
- Develop a comprehensive understanding of appropriate scientific techniques and how those techniques can be used to create and interpret knowledge.
- Develop an understanding of appropriate procedures and issues surrounding safe conduct

in laboratory and compliance with regulatory and legal requirements.

- Further develop their analytical, critical analysis, time management and IT skills
- Further develop their awareness of current issues in cancer therapeutics and safety pharmacology.
- Work as part of a research team on a real world project

Outline Syllabus

Introduction to specific project areas and laboratory methods, COSHH and biological risk assessment, ethical considerations, time management, data management. Introduction to research team and laboratory. 10 week laboratory research period. Writing a 10,000 word dissertation.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Demonstrate a systematic understanding of the application of current research methods to solve new problems.
- 10 Suggest appropriate future work based on your own and others results
- 11 Perform an assessment of potential hazards associated with research activity in your area and document a programme of work in accordance with all relevant safety, ethics, GLP and data management requirements.
- 12 Work effectively as part of a team to agree objectives, responsibilities and working arrangements.
- 13 Explore problems and compare and select options to overcome them.
- 14 Demonstrate effective time management and project planning.
- 15 Review your work and identify ways of improving future work. Identify your own professional development needs and take appropriate action.
- 16 Further develop an IT strategy to organise and refer to literature, and present data in an appropriate manner in your dissertation.
- 17 Develop a strategy to present and discuss your research.
- 18 Demonstrate effective communication skills in scientific writing and an oral examination.
- 2 Critically evaluate published results and your own work to formulate research conclusions and plan future work.
- 3 Use theoretical and practical approaches to analyse a current problem in Cancer Pharmacology, Cancer Drug Discovery or Safety Pharmacology.
- 4 Plan & implement a programme of original research.

- 5 Appraise a particular scientific problem; systematically gather, critically analyse and evaluate data in order to solve it; present data in appropriate way; apply statistical analysis where appropriate.
- 6 Interpret results & discuss critically in context of published work.
- 7 Further develop literature searching skills using electronic media sources.
- 8 Critically assess previously reported research.
- 9 Originally apply knowledge in a specific area.

Learning, Teaching and Assessment Strategy

The module develops and enhances student autonomy in learning. Each student has extensive choice, selecting a topic of interest to be researched from a list of options relevant to their specific programme. Following background reading from the scientific literature, an extended research project is carried out over 10 weeks, either as part of a research team in the University of Bradford, or in collaboration with an employer/industrial partner/research placement (students will be supported to explore overseas research opportunities such as ERASMUS/DKFZ Summer Internship in Cancer Research).

Learning outcomes are developed and achieved through the module by planning and completing an individually designed programme of laboratory work. Students meet frequently with their academic supervisor and other researchers who provide individual training and continual formative feedback to the student throughout the project. Prior to starting lab work, students will receive compulsory lectures on COSHH, biological safety, data management and university ethics requirements, and workplace inductions (LO2h). Students are required to submit a non-assessed introduction to the objectives of the project and the background to the work (500 words) and will receive formative feedback from their supervisor. Supervisors will provide formative feedback on 1 draft of the final dissertation. Learning outcomes 1-10 and 16-18 are assessed via a 10,000 word dissertation and a 20 minute structured viva voce examination. Learning outcomes 11-15 are assessed continuously through the module by the supervisor.

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Laboratory Report	Supervisor's assessment of laboratory performance		10%	No

Summative	Examination - oral/viva voce	Seminar/viva	20 minutes	10%	Yes
Summative	Dissertation or Project Report	Project report	-10000 words	80%	No

Legacy Code (if applicable)

Reading List

To view Reading List, please go to [rebus:list](#).