

Module Details	
Module Title:	Skin Biology, Stem Cells and Regenerative Medicine
Module Code:	BIS7013-B
Academic Year:	2019-20
Credit Rating:	20
School:	School of Chemistry and Biosciences
Subject Area:	Biomedical Science
FHEQ Level:	FHEQ Level 7 (Masters)
Pre-requisites:	
Co-requisites:	

Contact Hours	
Type	Hours
Lectures	20
Tutorials	3
Laboratory	6
Directed Study	171

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 1 (Sep - Jan)

Module Aims
<p>Aims: To develop a comprehensive understanding and detailed knowledge of:</p> <ol style="list-style-type: none"> 1. Skin development, skin structure and function in health and disease 2. Stem cells in development, tissue homeostasis and ageing 3. Aims, principles, tools and therapeutic potential of regenerative medicine 4 Major experimental models used in stem cell biology and regenerative medicine

Outline Syllabus
<p>Skin structure and function in health and disease; stem cells in development, tissue homeostasis, repair and ageing; molecular and cellular mechanisms of skin morphogenesis and</p>

regeneration; molecular and cellular mechanisms of skin ageing and diseases; aim, principles, tools and potential of regenerative medicine; major experimental models used in stem cell biology and regenerative medicine.

Learning Outcomes

1	Systematically understand, and be critically aware of, current knowledge of skin structure and function in health and disease, including skin development, homeostasis and regeneration.
2	Discuss how molecular and cellular defects lead to skin and hair follicle abnormalities and diseases.
3	Discuss the principles of stem cell biology in relation to development, tissue homeostasis and regeneration.
4	Critically evaluate the major experimental models used in Stem Cell Biology and Regenerative Medicine.
5	Critically evaluate the aims, principles, major tools and therapeutic potential of regenerative medicine.
6	Demonstrate personal responsibility for self-directed learning and time management.
7	Demonstrate oral and written scientific communication skills.

Learning, Teaching and Assessment Strategy

The curriculum to develop the knowledge and understanding required in this module is delivered in lectures. Development of knowledge and understanding and other skills, such as critical analysis of the information, problem solving and scientific writing, is also achieved using practical sessions and workshops. Significant time will be allocated for directed studies. The workshop exercises and practical classes will require students to work under pressure, meet deadlines and develop advanced communication skills.

The comprehensive knowledge and understanding of the subject developed by the student will be assessed by coursework assessments in the form of a written report and a critical literature review on a specific subject to develop written report and essay writing skills.

Mode of Assessment

Type	Method	Description	Length	Weighting
Summative	Coursework	Critical literature review on a specific subject	0-3000 words	60%
Summative	Coursework	Written report on 'Skin structure in health and diseases' workshop	0-2000 words	40%

Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>.

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.