Clinical Embryology

Programme Information

2022.01, Approved

Overview

Programme Code	36517
Programme Title	Clinical Embryology
Awarding Institution	Liverpool John Moores University
Programme Type	Masters

Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Master of Science - MS	N/A
Alternative Exit	Postgraduate Diploma - PD	Demonstrate an enhanced level of understanding of practical and theoretical aspects of clinical embryology. Demonstrate a range of key skills including: communication skills; critical analysis; data analysis/interpretation; teamwork. Demonstrate a clear understanding of the current methodologies and themes within ART and infertility treatment.

Alternate Award Names	

External Benchmarks

Subject Benchmark Statement	

Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length Programme Length Unit
Part-Time, Face to Face	September	LJMU Taught	1 Years

Aims and Outcomes

Educational Aims of the Programme	To provide students with extensive specialist knowledge in areas of clinical embryology including genetics, embryology, Assisted Reproductive Technologies (ART),and advanced laboratory techniques through a range of teaching and learning activities. To provide students with an understanding and appreciation of the ethical and legal issues associated with ART and infertility treatments. To develop extensive laboratory practical skills associated with ART; gamete micromanipulation and assessment, intra-cytoplasmic sperm injection (ICSI) and embryo biopsy for preimplantation genetic testing (PGT). To enhance students' understanding of the instrumentation and their applications used in the field of clinical embryology through theoretical lectures, practicals and workshops. To deliver understanding how business management skills and quality management procedures are essential in the clinic. To provide students with opportunities to undertake independent research in a clinical/academic setting, so as to develop their research skills, laboratory/analytical skills and risk assessment. To develop the student's transferable employability skills including; written and verbal communication, IT, problem-solving.

Learning Outcomes

Code	Number	Description
PLO1	1	Demonstrate an advanced level of knowledge and understanding of concepts, principles and theories relevant to clinical embryology, infertility and ART.
PLO2	2	Employ a range of bioinformatics databases to analyse, extract and process information.
PLO3	3	Provide oral and written technical presentations using a range of computational tools and packages.
PLO4	4	Convey findings to specialist and non-specialist audiences.
PLO5	5	Communicate effectively using a range of media.
PLO6	6	Demonstrate competency in the use of information technology to analyse, process, retrieve, prepare and present information.
PLO7	7	Demonstrate initiative and ability to work independently and as part of a team.
PLO8	8	Develop the organisational skills to manage resources and time.
PLO9	9	Learn to work under pressure, to deadlines and to make important decisions in an industrial/academic research setting.
PLO10	10	Develop relevant practical and analytical techniques applicable to clinical embryology.
PLO11	11	Develop knowledge and understanding of the academic research environment within the broad field of clinical embryology.
PLO12	12	Critically evaluate information and data from a variety of sources.
PLO13	13	Demonstrate originality in tackling and solving problems.

PLO14	14	Draw sound conclusions from information/data and communicate their findings clearly.
PLO15	15	Plan, develop and implement appropriate research methodologies.
PLO16	16	Critically evaluate experimental design.
PLO17	17	Plan, conduct, evaluate and report the results of a scientific research project.

Course Structure

Programme Structure Description

Programme Structure - 180 credit points	
Level 7 - 180 credit points	
Level 7 Core - 180 credit points	CORE
[MODULE] 7101PHASCI Research Methods Approved 2022.01 - 20 credit points	
[MODULE] 7501CEBMOL Embryology Approved 2022.01 - 20 credit points	
[MODULE] 7502CEBMOL Assisted Reproduction Technologies I Approved 2022.01 - 20 credit points	
[MODULE] 7503CEBMOL Genetics Approved 2022.01 - 20 credit points	
[MODULE] 7504CEBMOL Assisted Reproductive Technologies II Approved 2022.01 - 20 credit points	
[MODULE] 7505CEBMOL Advanced Laboratory Skills Approved 2022.01 - 20 credit points	
[MODULE] 7506CEBMOL Research Project Approved 2022.01 - 60 credit points	
Level 7 Optional - No credit points	OPTIONAL

Teaching, Learning and Assessment

Teaching, Learning and Assessment	Knowledge acquisition will be achieved through a combination of interactive lectures, seminars, workshops and practicals. Understanding is facilitated through workshops, tutorials, group work and independent study. Practical skills are developed by wet and dry practical activities, demonstrations, project work and seminars (external/internal speakers). The four-month research project/placement serves to develop knowledge and understanding of concepts and theories applicable to the broad area of clinical embryology. Knowledge and understanding are assessed through a combination of examination papers and coursework in the form of laboratory reports, oral presentations, research grant proposal, problem solving exercises, and project thesis. Intellectual skills are developed through the teaching and learning programme. Critical analysis and problem-solving skills are embedded in all modules and are taught, developed and practised through workshops, tutorials (small group),formative assessment exercises and all forms of project work. Experimental, research and design skills are further developed and practised through a broad range of coursework activities, laboratory work and all project work. Individual feedback is given on all work submitted. Critical thinking and problem-solving skills are normally assessed by examination and project report/laboratory report/literature review. Experimental research and design skills are assessed by portfolio, oral presentations, group report and practical report write-up. Professional practical skills are taught and developed through the programme's experimental components which include practical sessions, mini-project work and research project. Experimental design is taught in the Research Methods module via lectures and workshops. Professional practical skills are assessed in the project thesis, mini-project, paper preparation, portfolio and practical report write-up. Transferable and key skills are taught, developed and practised throughout the teaching and learning programme. Specialist mathematical skills are taught on specific modules, more basic skills are normally practised on all modules. Transferrable and key skills are assessed primarily through written examination and coursework including reports, essays and oral presentations.

Opportunities for work related learning

Opportunities for work related learning
The programme offers a four month work related learning research project (7506CEBMOL). Students will be offered a research project in the various aspects of clinical embryology. The work may be undertaken in University premises or at CARE Fertility. All work offers students the opportunity to develop their critical reasoning and complex problem-solving skills. Emphasis is also focused on the acquisition of new knowledge and skills that would secure future employment within the field of clinical embryology and related sectors.

Entry Requirements

Type	Description
Other international requirements	An international qualification that equates to UK requirements. International students must also have an English language qualification equivalent to at least IELTS 6.5 (a minimum of 6.0 is required in all components) as recognized by LJMU.

Programme Contacts

Programme Leader

Contact Name
Giles Watts

Link Tutor

Contact Name