

Programme Aim and Title	Postgraduate Certificate Musculoskeletal Ultrasonography - Injection Therapy  (PGCert MSK US Injection Therapy)
Intermediate Awards Available	N/A
Teaching Institution(s)	Full and part-time at the University of East London
Alternative Teaching Institutions (for local arrangements see final section of this specification)	N/A
UEL Academic School	Health Sport and Bioscience
UCAS Code	N/A
Professional Body	The programme provides 60 CPD credits in accordance with the CPD Scheme of the Royal College of Radiologists (RCR).
Relevant QAA Benchmark Statements	The nature and characteristics of the programme of post graduate study will follow subject benchmark statements aligned to Medicine ( <a href="http://www.qaa.ac.uk">www.qaa.ac.uk</a> ).
Additional Versions of this Programme	N/A
Date Specification Last Updated	July 2021

## Programme Aims and Learning Outcomes

### **This programme is designed to give you the opportunity to:**

This programme has been developed at the Homerton University's Sport and Musculoskeletal Medicine Department in collaboration with the University of East London's (UEL) Professional Health Sciences subject areas within the School of Health, Sports and Bioscience. The programme is aimed at the working healthcare professionals including, Medical Practitioners, Physiotherapists, Podiatrists, Osteopaths, and Sonographers who wish to extend their skills to include ultrasound guided interventional techniques in the management of musculoskeletal pathologies.

The Postgraduate Certificate in Musculoskeletal Ultrasonography – Injection Therapy (PGCert MSK US in Injection Therapy) is aimed at the postgraduate medical and allied health professional who already has a knowledge of musculoskeletal ultrasound as a diagnostic imaging technique. The programme aims to support and formally recognise the professional development of these clinicians working in the field of Musculoskeletal Medicine developing both knowledge and practical clinical skills in the application of ultrasound guided musculoskeletal injections.

All applicants to the PGCert MSK US in injection therapy will be qualified clinicians with autonomy and independence in US application and injection therapy without the formal competencies provided by the programmes. Pre- requisites are therefore not professionally appropriate. It is desirable that the existing PGCert MSK US in diagnostics should be completed prior to the proposed PGCert MSK US in injection therapy, although this will not be a prerequisite. It is desirable that module 1 should be attained prior to attending module 2, although this will not be a prerequisite.

The PGCert MSK US in Injection Therapy may be completed in conjunction with the Postgraduate Certificate in Musculoskeletal Ultrasonography Diagnostics (PGCert MSK US Diagnostics) and if both are successfully completed the student maybe awarded a Postgraduate Diploma in Musculoskeletal Ultrasound (PGDip MSK US).

**The aims of the programme are:**

- To develop an understanding of the principals involved in ultrasound guided injection techniques.
- To develop appropriate practical motor skills to be able to deliver accurate guided musculoskeletal injections.
- To provide the student with a current, scientific evidence based approach to understanding the physics and instrumentation of ultrasound in the context of musculoskeletal injections.
- To encourage an enhanced knowledge of upper and lower limb human adult anatomy for specific interventional techniques.
- To introduce the student in the use of clinical ultrasound as a resource for enhancing clinical intervention and diagnosis in musculoskeletal pathology.

## What you will learn

### ***Knowledge***

1. To critically reflect on current literature and principles of the use of ultrasound in guided musculoskeletal interventional techniques in relation to musculoskeletal pathology in the upper and lower limb.
2. To demonstrate a detailed anatomical knowledge relevant to commonly applied upper and lower limb injections.
3. To demonstrate a comprehensive knowledge of the pharmacological medicines used in interventional musculoskeletal medicine.

### ***Thinking skills***

4. To develop a critical understanding of the theoretical and professional considerations relevant to musculoskeletal ultrasound guided injections.
5. To develop clinical reasoning skills to be able to recognise when an injection is appropriate.

### ***Subject-based practical skills***

6. To generate high quality ultrasound images including needle identification and placement in both the upper and lower limbs.
7. To be able to recognise associated structures which need to be avoided when carrying out a guided injection.

### ***Skills for life and work (general skills)***

8. To critically reflect on the use of musculoskeletal guided injections in relation to both profession and place of work.

## Learning and Teaching

### ***Knowledge is developed through***

1. Guided reading supported by a comprehensive reading list and programme manuals.
2. Classroom based lectures and practical sessions.
3. Practical sessions in the Anatomy Laboratory with cadavers and prosections.

### ***Thinking skills are developed through***

1. Reflection on case based studies and work based portfolio.
2. Practical session discussions.

### ***Subject-based practical skills are developed through***

1. Classroom based practical sessions.
2. Anatomy laboratory practical sessions.
3. Clinical placement and work with mentor.

### ***Skills for life and work (general skills) are developed through***

1. Organisation and completion of clinical placement.
2. Completion of case studies.
3. Reflection of professional and medicolegal aspects of musculoskeletal interventional procedures.

## Assessment

Module Code	Module Name	Component of Assessment	Percentage Weighting	Word count / Duration
Module PT7169	Musculoskeletal Ultrasonography: Guided Injection Therapy in Application to Upper and Lower extremity.	Component 1: Medico-legal governance & Pharmacology MCQ	Pass/Fail 40%	60mins
	Musculoskeletal Ultrasonography: Guided Injection Therapy in Application to Upper and Lower extremity.	Component 2: Coursework Assignment	60%	3000 words
Module PT7170	Musculoskeletal Ultrasonography: Competency in Ultrasonography for guided injection Therapy in Clinical Practice – Work-based Placement.	Work based portfolio of 35 scans, including 4 reflective case study reviews. OSCE	Pass/Fail 80%  Pass/Fail 20%	3-6months

For a successful Work based learning experience and achievement of Module 2 learning outcomes, a work based clinical mentor is required to observe and review clinical musculoskeletal images produced by the student. This is in accordance with practical training suggested by the Royal College of Radiologists who advocate regular appraisal throughout clinical training.

Students with disabilities and/or particular learning needs should discuss assessments with the Programme Leader to ensure they are able to fully engage with all assessment within the programme.

## Clinical Placements

In addition to 2-days of classroom based teaching during module 2 students will need to complete a work-based portfolio of 35 ultrasound guided injections under the direct supervision of a suitable mentor submitting the finished portfolio for the successful completion of the module. It remains the responsibility of the student to ensure that they have an appropriate mentor.

There is no definitive qualification that is required for the mentor. However it would be expected that one or more of the following are met,

1. Radiologist with regular MSK US list
2. Sonographer, Physiotherapist or Sports Physician with a PGCert / Dip
3. Sonographer, Physiotherapist or Sports Physician who may not have a recognised qualification but who has regular MSK US list.

## Programme Structure

All programmes are credit-rated to help you to understand the amount and level of study that is needed.

One credit is equal to 10 hours of directed study time (this includes everything you do e.g. lecture, seminar and private study).

Credits are assigned to one of 5 levels:

- 3 Equivalent in standard to GCE 'A' level and is intended to prepare students for year one of an undergraduate degree programme.

- 4 Equivalent in standard to the first year of a full-time undergraduate degree programme.
- 5 Equivalent in standard to the second year of a full-time undergraduate degree programme.
- 6 Equivalent in standard to the third year of a full-time undergraduate degree programme.
- 7 Equivalent in standard to a Master's degree.

Programmes are made up of modules that are each credit weighted.

The module structure of this programme:

Level	Module Code	Module Title	Credit Weighting	Core/Option	Available by Distance Learning? Y/N
7	PT7169	Musculoskeletal Ultrasonography: Guided Injection Therapy in Application to Upper and Lower extremity	30	Core	N
7	PT7170	Musculoskeletal Ultrasonography: Competency in Ultrasonography for guided injection Therapy in Clinical Practice – Work-based Placement	30	Core	N

*Please note: Optional modules might not run every year, the programme team will decide on an annual basis which options will be running, based on student demand and academic factors, in order to create the best learning experience.*

### Requirements for gaining an award

In order to gain a Postgraduate Certificate you will need to obtain 60 credits at Level 7.

## Typical Duration

The duration of the PGCert MSK US Injection Therapy is one calendar year if full-time.

The time limit for completion of a programme is six years after first enrolment on the programme

## Further Information

More information about this programme is available from:

- The programme website [www.mskus.co.uk](http://www.mskus.co.uk)
- The UEL web site ([www.uel.ac.uk](http://www.uel.ac.uk) )
- The Course Director Dr. Peter Resteghini [p.resteghini@nhs.net](mailto:p.resteghini@nhs.net)
- UEL Manual of General Regulations (available on the UEL website)
- UEL Quality Manual (available on the UEL website)
- The programme handbook
- Module study guides
- UEL Manual of General Regulations (available on the UEL website)
- UEL Quality Manual (available on the UEL website)
- School web pages

All UEL programmes are subject to thorough programme approval procedures before we allow them to commence. We also constantly monitor, review and enhance our programmes by listening to student and employer views and the views of external examiners and advisors.

Additional costs:

There are no additional costs associated with this programme

## Alternative Locations of Delivery

Queen Mary University of London Anatomy Laboratory