DELIVERING EXCEPTIONAL MEDICAL EDUCATION

MSc CLINICAL ANATOMY

MSc CLINICAL ANATOMY AND EDUCATION

Postgraduate Brochure 2020-21
Welcome to Hull York Medical School, where we deliver exceptional medical education in a vibrant and supportive learning environment. Our experts and clinicians will encourage you to think independently, critically and differently. So if you are passionate about anatomy and want to boost your career, you’re in good hands...
Hull York Medical School is a unique partnership between the Universities of Hull and York, meaning you will have access to a wealth of resources from both institutions.

We look at medical education differently and we believe our graduates are better clinicians, practitioners and researchers as a result. On this programme, you will become a lifelong learner, developing the skills and techniques to question perceived knowledge and to push the boundaries of what we know and understand about human anatomy.

We don’t believe in simply relying on tried and tested anatomical knowledge – we believe in furthering that knowledge. We will encourage you to delve more deeply into human anatomy and apply carefully honed research and analytical skills to uncover new truths. As critical, enquiring and resilient students, we believe you will be better equipped to succeed – whatever your career.

As a Masters student studying Clinical Anatomy, you will be able to schedule your own dissection time in our state-of-the-art HTA-licensed facilities, working on Thiel embalmed cadavers. Working with our experts you will be able to direct your learning to suit your own career goals.

We are proud to offer two programmes which we believe provide a unique opportunity to immerse yourself in the practical and in-depth study of clinical anatomy. Dissection is at the core of our programmes, enabling you to enhance your knowledge and develop your practical skills. The experience we offer will help further your career, and improve your employment opportunities. We look forward to welcoming you to Hull York Medical School and working closely with you as partners in your learning experience.

Dr Katherine Sanders, Programme Director

PASSIONATELY OBJECTIVE

Conducting whole-body Thiel dissection is a real privilege, and allows you to manipulate the human body in a realistic manner which is incredibly insightful. Small group seminars are a great help in putting the anatomical learning into a clinical context, supported by an expert surgeon.

Savraj Kalsi, intercalating Medicine student, MSc Clinical Anatomy
ABOUT THE PROGRAMMES

At Hull York Medical School, we believe we offer the very best, most rigorous and most exciting Clinical Anatomy programmes. You can choose between two programmes: Clinical Anatomy, and Clinical Anatomy and Education, and both are designed to give you advanced training in critically applied human anatomy. You will be able to choose from a range of modules to tailor the programme to suit your interests and career goals. These programmes are aimed at ambitious clinicians and healthcare practitioners from a diverse range of specialties and backgrounds who want to enhance their careers.

As well as improving your anatomical knowledge, you will also develop an analytical approach to research, manual dissection skills, presentation skills and gain invaluable teaching experience. We have developed these programmes around core dissection-based modules and throughout the duration of the course, you will conduct whole-body dissections, working on a minimum of two cadavers in small groups. This is an unparalleled opportunity to learn about all aspects of human anatomy and to get first-hand dissection experience.

YOU WILL CONDUCT WHOLE-BODY DISSECTIONS, WORKING ON A MINIMUM OF TWO CADAVERS

YOU WILL LEARN FROM EXPERIENCED CLINICIANS CURRENTLY IN PRACTICE AS WELL AS EXPERT TUTORS AND ACADEMICS IN SMALL GROUP SESSIONS

We vary our embalming techniques to ensure the best possible learning experience for our students, using Thiel-embalming techniques for limbs, which keeps the cadaver as close to living tissue as possible in texture, colour and flexibility, and Formalin for organs. These varied embalming techniques are used to maximise the learning potential of different body systems, and to enable better dissection.

MSC IN CLINICAL ANATOMY

The MSc in Clinical Anatomy will enable you to acquire and develop advanced anatomical skills and knowledge. Applying topographical, biomechanical, developmental and radiological perspectives, you will understand how cadaveric material translates to the anatomy of the living person.

At the heart of this programme is how you will apply your anatomical knowledge in a clinical and practical context - whether that be clinical decision-making or practice. Small-group seminars and tutorials are led by practising clinicians and experienced tutors who will draw on their own experiences to bring anatomical knowledge and learning to life.

You will also have the opportunity to teach anatomy to students on our Medicine and Physician Associate programmes, which will further develop skills to enhance your career and your anatomical knowledge.

MSC IN CLINICAL ANATOMY AND EDUCATION

You will acquire and develop the same range of skills as students on the MSc in Clinical Anatomy, but in addition you will develop your skills as an educator and researcher. This programme will provide you with a comprehensive professional education to develop you as a teacher and researcher of anatomy.

The education modules on this programme are delivered by our Health Professions Education Unit. You will be trained in pedagogical techniques that will allow you to teach anatomy to students and healthcare professionals and also conduct an education research project.

This programme is a useful and significant step on the path to applying for Fellowship of the Higher Education Academy (HEA).
PROGRAMME DURATION

You can choose to study full-time for one year, or part-time over two or three years. If you are an intercalating student you will need to opt for the full-time study option. The part-time options are ideal if you want to continue working alongside your studies.

CAREERS

Students on these programmes come from a diverse range of backgrounds and go on to develop careers in surgery, clinical practice and allied health disciplines. These programmes are also invaluable if you are a practising clinician or healthcare professional, considering an academic career or a career in medical education.

WHERE YOU WILL STUDY

You will be based predominantly at Hull York Medical School’s facilities at the University of Hull, although you may be required to travel to the University of York for some electives.

INTERCALATION

If you are considering intercalating during your Medicine degree, and you are interested in developing your anatomical knowledge, this programme is ideal.

Studying a Masters degree earns you more points for the Foundation Programme Application System than a Bachelors degree. We believe our Clinical Anatomy programmes give you the skills to be a better clinician, as well as giving you a competitive edge when applying for foundation year training.

While on the course I have also been able to teach anatomy to peers across both Medicine and Physician Associate courses, which has been challenging but immensely rewarding. This invaluable experience has helped me to develop my skills as a teacher and set me on the path to HEA accreditation, which will hold me in good stead in my future career.

Oluwafemi Coker, intercalating Medicine student from University of Plymouth
The clinical anatomy programmes offer a mix of core modules and electives, giving you the opportunity to develop fundamental anatomical knowledge whilst also enhancing your skills in a specialist area of interest. If you opt to study Clinical Anatomy and Education, you will need to choose at least two education elective modules and a research project on education.

**CORE MODULES**

**Clinical anatomy of the limbs and spine**
You will perform a detailed dissection of the human upper limbs, lower limbs and back, and explore their clinical anatomy in the regional, biomechanical, developmental, functional and radiological context.

**Clinical anatomy of the trunk**
You will perform a detailed dissection of the human trunk (thorax, abdomen, pelvis and perineum), and explore their clinical anatomy in the regional, biomechanical, developmental, functional and radiological context.

**Research project/dissertation**
You will undertake in-depth research on an anatomical, clinical-anatomical, or educational topic, and produce a formal dissertation. You will gain experience of conducting independent research, from formulating a research question to presenting findings in written and spoken form.

One of the unique aspects of this course is the chance to interact with expert clinicians during the weekly seminars where the anatomy that you have learnt is firmly placed into its clinical context. Discussing clinical cases and debating complex issues as a group allows you to apply and to problem solve with your newly acquired knowledge, helping you to see the relevance of what you are learning to your future career.

Walter Mercer-Holland intercalating Medicine student, MSc Clinical Anatomy and Education.
ANATOMY ELECTIVE MODULES

Clinical microanatomy
You will critically evaluate the microstructure of tissues and organs in the context of their function, dysfunction and pathology, and develop skills in the evaluation of tissue samples.

Clinical neuroanatomy
By critically evaluating the detailed clinical anatomy of the brain in its topographical, developmental, functional and radiological context, you will acquire the spatial, analytical and technical skills for the application of neuroanatomical knowledge to decision making in clinical practice.

Radiological anatomy
You will develop skills and expertise in the interpretation and evaluation of normal and variant anatomy in radiological images. The module will provide the basis for pursuing research in medical sciences based on experimental models involving structural imaging.

Hard tissue biology
You will develop an advanced knowledge and understanding of the structure, function, growth and development of mineralised skeletal and dental tissues.

Human evolutionary anatomy
You will gain an advanced understanding of the hominin fossil record, focusing particularly on the interpretation of anatomical material and current methods in relation to past behaviours. In this module you will also examine casts and CT scans of the major fossil specimens, as well as study comparative extant material.

RESEARCH SKILLS ELECTIVE MODULES

Research methods and statistics
You will acquire the knowledge and skills to critically appraise the strengths and weaknesses of different research designs from previously published works, analyse and critically evaluate experimental, quantitative and qualitative research design methods, and develop expertise in statistics-based computer programmes to solve complex research-related problems.

Pedagogic research
This module will provide you with a robust introduction and overview of key research methods in the area of pedagogic research. It will facilitate the development of a substantive research protocol for the purposes of a dissertation in anatomical/medical education.

Basic skills in geometric morphometrics
This module will equip you with expertise and skills in the theory and practice of geometric morphometrics, and prepare you for research in phenotypic and functional variation in human and comparative anatomy.

Basic skills in virtual anatomy
This module will equip you with expertise and skills in the theory and practice of modern imaging, modelling and visualisation methods ('virtual anatomies') and their application to research questions in human and primate anatomy and evolution.

YOU CAN PERSONALISE YOUR ROUTE TO SUIT YOUR OWN INTERESTS AND CAREER AIMS

CREATIVELY

ANALYTICAL
IMAGING ELECTIVE MODULES

**Imaging modalities 1**
This module will equip you with the knowledge and skills to critically evaluate and interpret current state-of-the-art applications of imaging modalities that use ionizing radiation.

**Imaging modalities 2**
This module will equip you with the knowledge and skills to critically evaluate and interpret current state-of-the-art applications of ultrasound scanning, magnetic resonance/spectroscopic imaging (MRI and MRSI), and magnetic resonance guided focused ultrasound (MRgFUS).

EDUCATION ELECTIVE MODULES

**Learning and teaching**
You will be introduced to the basic principles in learning and teaching within a health profession/clinical environment. You will enhance your skills as an effective clinical teacher, gain a good grounding in educational theory and develop basic teaching skills such as writing outcomes.

**Assessment and feedback**
You will learn the key principles and practices underpinning effective assessment and feedback, and use case studies to explore the relationships between assessment, feedback and learning.

**Contemporary issues in Health Professions Education**
This module will challenge you to reconsider the ideologies and assumptions underpinning current models of curriculum, course and assessment design in Health Professions Education. You will be engaged in critically examining the key discourses and ideologies shaping medical and health professions curricula.

**Anatomy pedagogy**
This module will prepare you to teach anatomy by introducing different pedagogic approaches, assessment methods that are unique to anatomy, and concepts relating to legislation, storage and preparation of cadaveric material.

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**Dissection as part of each module has really helped me to develop my skills with all of the surgical tools, and has given me a feel for a surgical career in the future. The learning environment lends itself to self-directed learning, where you can explore whatever anatomy you need to.**

Danielle Hill, intercalating Medicine student, MSc Clinical Anatomy
# PROGRAMME TIMELINES

## ONE YEAR FULL-TIME INDICATIVE TIMETABLE

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<thead>
<tr>
<th>Term 1 (Oct-Dec)</th>
<th>Term 2 (Jan-Mar)</th>
<th>Term 3 (Apr-Jun)</th>
<th>(Jul-Aug)</th>
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<tr>
<td><strong>Core</strong></td>
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<tr>
<td>• Clinical Anatomy: Limbs and Spine (20 credits)</td>
<td>• Clinical Anatomy: Head and Neck (20)</td>
<td>• Clinical Anatomy: Trunk (20)</td>
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<tr>
<td><strong>Optional</strong></td>
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<tr>
<td>• Radiology Anatomy (10)</td>
<td>• Clinical Microanatomy (20)</td>
<td>Research Project/ Dissertation (60) - CORE</td>
<td>Research Project/ Dissertation writing up and submission</td>
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<tr>
<td>• Clinical Neuroanatomy (10)</td>
<td>• Human Evolutionary Anatomy (20)</td>
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<tr>
<td>• Learning and Teaching (20)</td>
<td>• Anatomy Pedagogy (20)</td>
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<tr>
<td>• Hard Tissue Biology (20)</td>
<td>• Assessment and Feedback (20)</td>
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<tr>
<td>• Imaging Modalities I (20)</td>
<td>• Contemporary Issues in HPE (20)</td>
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<tr>
<td><strong>Research Skills</strong></td>
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<tr>
<td>• Basic Skills in Virtual Anatomy (5)</td>
<td>• Imaging Modalities II (20)</td>
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<tr>
<td>• Basic Skills in Geometric Morphometrics (5)</td>
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<tr>
<td>• Pedagogic Research (10)</td>
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<tr>
<td>• Research Methods and Statistics (20)</td>
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## TWO YEAR PART-TIME INDICATIVE TIMETABLE

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<tr>
<td>Choose between 20-30 credits of these elective modules:</td>
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<td><strong>Year 2</strong></td>
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<tr>
<td>Choose up to 40 credits of any combination of these elective modules:</td>
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*The programme timelines above are for illustrative purposes only and are subject to change.*

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We encourage all our students to be life-long self-directed learners. You will have numerous opportunities to immerse yourself in the subject, enhance your knowledge and gain new skills, and you will be the driving force behind your own learning and development.

In addition, we employ a variety of teaching, learning and assessment techniques to deliver these programmes through structured sessions led by clinicians and/or tutors to help you get the most out of your studies with us.

These structured sessions include:
- Whole body dissection on Thiel-embalmed cadavers
- Online and digital learning and assessment resources
- Practical laboratory activities
- Independent study
- Small group practical work
- Seminars and workshops
- Peer discussion and observation
- Teaching practice
- Flipped classrooms
- Reflective portfolios
- Dissertation supervision

ENTRY REQUIREMENTS

Applicants must have previous training in human or mammalian biology (e.g. graduates from medical, biomedical, anatomical science, veterinary medicine, and zoology backgrounds). Applicants whose first language is not English will be required to demonstrate evidence of proficiency in English Language as follows: IELTS: 6.5 (in the academic test, with minimum score of 6.0 in all four language competences: listening, reading, speaking and writing, taken in the last two years).

The University of Hull offers Pre-Sessional English Language courses for international students wishing to improve their English language skills. Further information can be found at www.hull.ac.uk.

Intercalating medical students must have successfully completed a minimum of three years of an MB BS or comparable medical qualification.

STUDENT SUPPORT

Postgraduate study requires a huge personal commitment and these programmes are no different. They are intensive and challenging but ultimately hugely rewarding. In addition to the student support services at the Universities of Hull and York, we also have our own dedicated student support team providing a range of pastoral services to all our students.

FEES AND FUNDING

Please visit our website (www.hyms.ac.uk/clinical-anatomy) for comprehensive and up-to-date information on tuition fees as well as financial support available.

HOW TO APPLY

If you would like to apply for a place on the Masters in Clinical Anatomy or the Masters in Clinical Anatomy and Education, you will need to complete an online application form.

To apply for the MSc in Clinical Anatomy, visit: www.hyms.ac.uk/clinical-anatomy
To apply for MSc in Clinical Anatomy and Education visit: www.hyms.ac.uk/clinical-anatomy-and-education
FOR FURTHER INFORMATION

Admissions Enquiries:
pgtadmissions@hyms.ac.uk
01904 321690

Find out more and take a look at our programme video:
hyms.ac.uk/clinical-anatomy
hyms.ac.uk/clinical-anatomy-and-education