REMOTE MEDICINE BSc.

INTRODUCTION
COURSE GUIDE
2019–2020

Imperial College
London
Welcome to the Remote Medicine BSc.

It is a pleasure to welcome you on to new course. As a brand new course, the Remote Medicine BSc. has been carefully designed to provide the optimal learning environment, exciting content and expert faculty for enrolled students.

The course will be structured differently to the curriculum you will have been used to and will challenge you in different ways; encouraging critical thinking, problem-solving and collaborative working. You will be introduced to new and exciting fields of medicine related to extreme environments, such as ‘Aviation and Space’, and be taught by those working on the front line of these emerging subject areas. We will help you develop the core skills to interrogate academic literature, form conclusions of your own and apply this to clinical decision-making. You will be exposed to the impact that logistics, the environment and ‘human factors’ can have in clinical medicine, as well as research, and ways to acknowledge and adapt to these complexities. You will then have the opportunity to apply these newly-developed skills on our research expedition to Nepal through our collaboration with ‘Community Action Nepal’, a well-established NGO.

In addition to providing excellent learning opportunities, we are committed to supporting you to develop as happy and confident future doctors. We will showcase the vast array of opportunities available in Medicine, within and outside traditional UK training pathways and offer personal mentoring and pastoral support in dedicated 1-to-1 meetings throughout the course.

This course guide provides an overview of what to expect throughout the year, including; timetabling, key information regarding in-course assessments and an introduction of key faculty members.

Further information will be made available on Blackboard & MS Teams.

We hope you’re looking forward to the year ahead.

Andrew.

Dr. Andrew Darby Smith
Remote Medicine BSc. Course Director
e: andrew.smith@imperial.ac.uk
The Remote Medicine BSc. has been designed to achieve a clear objective and work towards our future vision. Our course is based on six key principles and three cross-cutting themes.

**COURSE STRATEGY**

**OUR FUTURE VISION**
A THRIVING COMMUNITY OF REMOTE MEDICS AT IMPERIAL

**COURSE OBJECTIVE**
DEVELOP RESEARCH SKILLS BY EXPLORING MEDICINE IN THE MOST REMOTE & AUSTERE ENVIRONMENTS

**KEY PRINCIPLES**

- ENSURE COURSE CONTENT MEETS THE HIGHEST ACADEMIC STANDARDS.
- OPTIMISE TEACHING METHODS TO PROVIDE THE BEST LEARNING EXPERIENCE.
- SUPPLEMENT TEACHING WITH NON-TECHNICAL & CLINICAL SKILLS TRAINING.
- PRIORITISE MENTORING & CONTINUED PROFESSIONAL DEVELOPMENT SESSIONS.
- SHOWCASE THE BREADTH OF EXCITING CAREER PATHS AVAILABLE IN MEDICINE.
- PROVIDE THE OPPORTUNITY TO CONDUCT RESEARCH IN A REMOTE ENVIRONMENT.

**CROSS – CUTTING THEMES**

COLLABORATION  
INNOVATION  
TEAM CULTURE
The Remote Medicine BSc. covers a wide range of subject areas, requiring a diverse group of tutors. Key faculty members are introduced in this guide, but you will likely only meet some tutors during the course.

As well as specialist faculty, we also have a core team delivering the BSc. who you’ll see throughout the year. We will be your ‘go to’ faculty for queries, concerns, assessments and mentoring during the course.

**CORE FACULTY**

**DR ANDREW DARBY SMITH**  
Course Director & Module 2 Clinical Lead  
e: andrew.smith@imperial.ac.uk  
Andrew is involved in all three modules of the course (incl. pastoral care & mentoring) and retains overall responsibility for the delivery of the Remote Medicine BSc.

**DR TAMLYN PEEL**  
Module 1 & Module 3 Lead  
e: tamlyn.peel@imperial.ac.uk  
As Module 1 Lead, Tamlyn is responsible for the delivery of ‘Themed Weeks’. In addition, he is responsible for the research expedition to Nepal. He will be involved in the majority of the course.

**DR JAMES MOSS**  
Module 1 Assessment Development & ‘Diving Medicine’ Theme Lead  
e: james.moss@imperial.ac.uk  
James is heavily involved in medical education and curriculum review at Imperial. He has helped develop assessments in Module 1, as well as being appointed ‘Theme Lead’ for Dive Medicine.

**DR PANKAJ ‘PANK’ BHAVSAR**  
Module 2 Academic Lead  
e: pankaj.bhavsar@imperial.ac.uk  
Pank is a Senior Research Fellow at The National Heart & Lung Institute. He is involved in other BSc. courses based at NHLI and is responsible for the Module 2 academic assessment.

**MS LIZZIE LOMER**  
Administration & Communications  
e: lizzie.lomer@imperial.ac.uk  
Lizzie is responsible for administrative aspects of the course and manages course communications. She will be your first port of call for assessment submissions, queries and key information.
The Remote Medicine BSc. is based at The National Heart & Lung Institute at the Royal Brompton Campus, and most teaching will take place in the rooms within The Guy Scadding Building. Occasionally, particularly if specialist rooms will be required, you will need to travel to different campuses. Please see below for common locations for scheduled teaching, and check the location of teaching sessions before you travel.

**COURSE LOCATIONS**

- **Guy Scadding Building**
  - RAZ
  - Exhibition Road
  - South Kensington Campus
  - SIR Alexander Fleming Building

- **The Wolfson Centre**
  - Du Cane Road
  - Hammersmith Hospital

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MODULE 1

The first module of the course is delivered across 12 weeks (23\textsuperscript{rd} September - 15\textsuperscript{th} December 2019). It consists of 7 x ‘Themed’ weeks (each focused on a specific remote environment) and 2 x ‘Case Series’ weeks (in which you will be able to apply new knowledge to specific cases or problems). In addition, there are 3 x ‘Consolidation’ weeks within the course providing time to reflect on learning, work on in-course assessments, attend ‘Mentor Meetings’ or engage in further optional learning opportunities.

MODULE 2

The second module takes place over 3.5 weeks (2\textsuperscript{nd} January - 26\textsuperscript{th} January 2020). It provides an opportunity to work in small groups to research, write, review and submit an academic paper. Specific subject material will be based on content already covered and you will receive support and guidance from ‘Academic Supervisors’, some of whom you will have met in previous sessions.

In addition to the academic task, Module 2 will also include a ‘Science in Context’ component. This will be an opportunity to apply knowledge learnt to clinical problems related to the provision of emergency medical care in remote environments.

MODULE 3

The final module spans 17 weeks (27\textsuperscript{th} January - 24\textsuperscript{th} May 2020) & includes 2 weeks of ‘Easter Holiday’. This module provides an extended period of time to gain exposure to research and academic work related to Remote Medicine.

We will be offering all enrolled students the opportunity to join our research expedition to the Nepalese Himalayas in March/April 2020 (for additional cost). This will involve; pre-departure data collection and experiment development, 3 weeks in Nepal (incl. Data collection from remote healthcare posts and physiological data collection relating to the effects of high altitude), post-expedition project write-up and submission.

We will also be offering UK-based research projects for any enrolled students who cannot / would prefer not to take part in the research expedition.

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**COURSE STRUCTURE**

**MODULE 1**

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**MODULE 2**

**MODULE 3**
CORE TEACHING METHODS

The first module will provide an introduction to several remote environments. Specific teaching methods, alongside time for independent learning, have been chosen to provide the best learning experience possible. Some of the methods used will be new to you, but we’re sure they’ll be useful.

LECTURES

Lectures will be used to provide an introduction to topic areas that you may have limited knowledge about. In addition, some weeks will include a ‘Masterclass’ talk from a guest lecturer. These sessions provide a deeper dive in a specific topic or area of research.

PROBLEM-BASED LEARNING

Most students will have had some exposure to PBL sessions. We will be using PBL to allow deeper learning by solving clinical problems in remote environments. Conducted across two sessions, PBL will require you to research topics, review related evidence, work in teams & commit to a course of action.

TEAM-BASED LEARNING

Likely new to most students, TBL sessions allow you to research, discuss and solve problems as a group in real-time. With expert faculty chairing each session, groups will be able to discuss and debate their answers, developing a deeper understanding of topics.

PRACTICALS

Practical sessions are an important part of your introduction to academic medicine. The ability to develop hypotheses, conduct experiments, analyse data as well as evaluate results is a key skill and applicable to various types of research conducted in remote environments. The breadth of content covered on our course also means you will be exposed to a variety of types of practical sessions, from lab-based physiology experiments to table-top exercises of logistics and humanitarian response.

JOURNAL CLUB

Journal Clubs are an opportunity to discuss interesting literature as a group. You will be able to practice appraising various papers, forming opinions on their findings and conclusions of your own. A common part of postgraduate teaching for doctors, the skills developed in journal clubs will be incredibly useful for your BSc. assessments and beyond.

THE PATIENT EXPERIENCE

These sessions will provide an opportunity to hear a personal account of an event occurring in a remote environment. These may include personal experiences of healthcare professionals, patients or others. Relating to scenarios introduced in Module 1, these sessions will add an important dose of reality to the topics discussed.

REFLECTION

Short ‘Reflective Sessions’ will be scheduled at the end of each ‘themed’ week. Reflective practice is key to efficient learning, as well as being a cornerstone in continuing education as doctors. In addition, reflecting on the week allows for quality feedback about what was most interesting, most useful and what could be improved. By engaging in these sessions, we can quickly respond to comments & amend upcoming sessions to provide the best learning experience possible.
The Module 1 Timetable is due to be uploaded to MS Teams before each ‘Themed Week’. Teaching will take place on weekdays between 0900 – 1700, with a one-hour lunch break every day. The timetables will follow the same formatting; the ‘title’ of each session will be provided, along with an assigned colour scheme that denotes the Teaching Method to be expected and a campus location. Please see below for a simple key.

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