



2019 Cambridge Summer Institute

Medicine Programme





I. Introduction

Magdalene College is located in the centre of Cambridge on the River Cam. It was founded in 1428 when King Henry VI approved the establishment of a Benedictine hostel on the site for the monks to study Canon Law at the University. The college was refounded and renamed after the Saint Mary Magdalene in 1542. Today, the College has some 320 undergraduates, nearly 180 graduate students and around 60 Fellows and other teaching officers.

Cambridge Summer Institute (CSI) is an exclusive study abroad programme offered by Magdalene College (University of Cambridge, UK). Courses on a variety of subjects are offered through CSI: International Business & Management, International Relations & Politics, History, Medicine and Learning Skills. CSI works with an outstanding faculty that is comprised of current professors, lecturers, researchers and tutors from the University of Oxford and the University of Cambridge.

II. Medicine Programme Introduction

The Medicine Programme, offered by the Cambridge Summer Institute, is designed for students currently studying medicine or professionals in the Healthcare field. The programme offers its participants the opportunity to attend lectures and workshops delivered by esteemed Professionals and Academics in the field of Medicine. There are a number of courses available within the programme each targeted toward students with differing levels of experience.

Discovery Level: These courses are targeted towards students in the first or second year of their medical education. The lectures will introduce delegates to new concepts, practices and principles in medicine.

Exploratory Level: These courses are targeted towards students who have already completed a number of years of medical education and are looking to deepen their existing knowledge and explore alternative perspectives and approaches.

Session Dates: 18 August - 31 August 2019

Course Options:

* All course topics are subject to availability of the faculty and Magdalene College would be happy to offer other course topics upon the request from the partnership universities..

1. UK Medical System & Education (Discovery Level)



This series addresses the way that social factors are implicated in the course of disease and treatment, and also introduces ethical and legal questions which arise for the medical profession, both in hospital and in the community. All the lectures relate to the practice of medicine in Britain. The topics are driven by developing an awareness of what patients really bring to the medical encounter, including their expectations about their health and about healthcare. These expectations are influenced by broader issues relating to gender, age, ethnic and cultural background, and what they can and cannot afford to do to help their health.

This series addresses themes including stigma, health inequalities, chronic illness, the changing role of doctors, consent and confidentiality, populations and resource allocation, and the position of the medical profession in society. Students will be encouraged to think out from these particular topics to wider questions about health and what might constitute the good life.

2. Practicing Medicine in the UK (Exploratory Level)

The general principles of practising medicine is universal. However, there are many differences between countries due to factors such as language, culture and the health care system. This course will give an insight onhow medicine is practised in the UK using real life scenarios, exploring areas such as patient-centered care, multi-disciplinary team work and evidence-based medicine. By using various teaching methods including role-play, group discussions and problem-based learning, students will be given opportunities to discuss medical issues and learn how medicine is practised in the UK. During this course, there will also be a focus on life-long learning for students to reflect on during the rest of their careers.

3. Exploring the Ethics and Practice of Palliative Care (Discovery Level)

The practice of palliative medicine is an art and a science. The teachers from the hospice are able to provide sessions covering the fundamentals of palliative medicine as well as offering personal insights on working with patients and their families living with and dying from life-limiting illness in England.

4. Medical Ethics – An exploration of the big issues in medical ethics (Exploratory Level)

The course above will explore how to approach medical ethics with a structured and systematic approach and highlight how these principles can be applied in real life situations.

We will explore the ethical issues raised by two very timely topics in medicine: vaccination and human bioenhancement (that is, the use of medicine not to treat disease, but to improve human capacities). For both topics, we will analyse the ethical implications not only for individual choices, but also for policy making, in particular whether the state and public health authorities should coerce individuals



into making certain choices (e.g. vaccination) or should leave individuals free to make others (e.g. using bioenhancements)

III. Faculty

Cambridge Summer Institute compose a strong team of faculty members including professors, university lecturers, university researchers, college tutors, and DPhil candidates from the University of Oxford (UK) and the University of Cambridge (UK) as well as partnership universities.

In previous years the following faculty members (selection) have taught on the medicine courses at the Cambridge Summer Institute:

Professor Andres Floto, Professor of Respiratory Biology, Cambridge Immunology Network, University of Cambridge (UK)

Dr James Thomas, School of Medicine, Keio University (Japan)

Dr Yosuke Matsumiya, Specialty Registrar in Obstetrics & Gynaecology, Thames Valley Deanery at Oxford University hospitals

Dr Lorraine Petersen, Medical Director, Arthur Rank Hospice, Cambridge (UK)

Kay Hardwick, Head of Education and Practice Development, Arthur Rank Hospice Charity, Queens Nurse

Reverend Dr Jamie Hawkey, Dean and Director of Studies, Clare College, University of Cambridge (UK)

Sabrina Gabrielle Anjara, Queen's College, University of Cambridge (UK)

IV. Preceded Medicine Programme

1. Natural Science – Biochemistry Programme at Cambridge Summer Institute

The Natural Science programme offered by the Cambridge Summer Institute, is designed for students and young professionals with an interest in Science. The programme offers its participants the opportunity to attend lectures and workshops delivered by esteemed Academics in the field of Science. There is an opportunity to combine courses – this programme complements the Medicine programme also



offered at the Cambridge Summer institute, and the STEM programme offered at the Summer Institute at Oriel College in Oxford. The focus of the programme is on Biochemistry – the study of chemical processes within living organisms, which forms the basis of studies in biology and medicine.

Biology of Stem Cells

Early embryonic development

-Origin of embryonic stem cells

Embryonic Stem Cells

- -Transcription factors regulating Embryonic stem cell identity
- -Signaling requirements
- -Developmental potential of Embryonic stem cells
- -Human Embryonic stem cells

Adult Stem Cells

- -Examples of adult stem cells
- -Potential of adult stem cells

Biology and application of IPS Cells

Induced pluripotent Stem Cells

- -The discovery of induced pluripotent stem cells
- -Potential of induced pluripotent stem cells
- -Biology of induced pluripotency
- -Methods of induced pluripotency

Cell Transdifferentiation

- -What is cell transdifferentiation
- -The potential of cell transdifferentiation

2. Two Weeks at Summer Institute at Oriel College, Oxford

Delegates interested in studying an additional two weeks of Medicine are invited to join the Summer Institute at Oriel College in Oxford for the preceding two weeks (29th July – 11th August 2018). These courses provide medical students an opportunity to explore the Law and Economics behind the practice of medicine. The two following courses are on offer prior to the Medicine Programme at the Cambridge Summer Institute:

• Medical Law and Ethics:

This course provides an introduction to important topics in UK medical law including consent, negligence, reproductive medicine and end-of-life decision-making. It will also consider ethical issues raised by each of these areas, and evaluate whether the law currently takes the correct approach to them, or whether the law ought to be reformed. Delegates will engage in discussion and debate on the ethical problems that arise, and how the law ought best to accommodation these.



Macroeconomics: 'Global Health Challenges'

The Economics of Big Health Challenges: This course will discuss and analyse the state of health in the world and the challenges of the next 20-50 years. In addition, delegates will learn how health financing will need to adapt to the challenges of an aging population. Case studies analysing pandemics, such as SARS, flu, and Ebola, will be looked at in detail to understand how these cross over into the financial market, looking at early warning, and response ideas.

V. Additional Course Features

- 1. Academic Evening Talks: We invite industry professionals, VIPs, and subject specialists to our Evening Talks, where a number of thought provoking and current issues are discussed in greater depth.
- 2. Excursion: During students' time off, there are planned trips to top attractions and landmarks around the United Kingdom. Locations delegates can choose from include Stratford-upon-Avon, Ely and London.
- 3. Cultural Activities in Cambridge: Throughout the programme, delegates will have the opportunity to get to know the city of Cambridge through a variety of activities
- Welcome Reception
- Fitzwilliam Museum
- Scot Polar Museum
- Cambridge Walking Tour
- Magdalene College Tours
- **Traditional Punting**

- Film Nights
- **Pub Tour**
- Quiz Night
- River Cruise
- Evening talks
- Farewell Dinner

VI. Certificate, Academic Transcript, and Accreditation

Each week, one course will be taught. Combining lecture time, preparation, study time, and tests, each week is designed to be equivalent to 2 - 3 ECTS credits or 1 - 1.5 US credits. Delegates are invited to participate in one examination each course.



Cambridge Summer Institute is a certificate programme that may be accountable for optional credits depending on the requirements of the home institution/school/university.

A certificate of attendance will be issued by Magdalene College. An Academic Transcript will also be issued by Magdalene College and will show the courses attended by each delegate. It will indicate the workload of each course as well the results of exams and assignments.

VII. Tuition and Fees

Tuition fee (per 4-week session) 4,070GBP

Tuition fee (per 4-week session) for FUDAN university 2,560GBP

The tuition fee includes all lectures, lecture materials, leisure activities, and planned weekend excursions.

Accommodation and Food (per 4-week session)

2,650 GBP

The Summer Institute offers the opportunity to stay in one of the colleges of the University of Cambridge (UK). All rooms are single rooms with shared bathroom facilities. Breakfast, lunch and dinner will be offered by the college from Monday to Friday. On weekends only breakfast will be served.