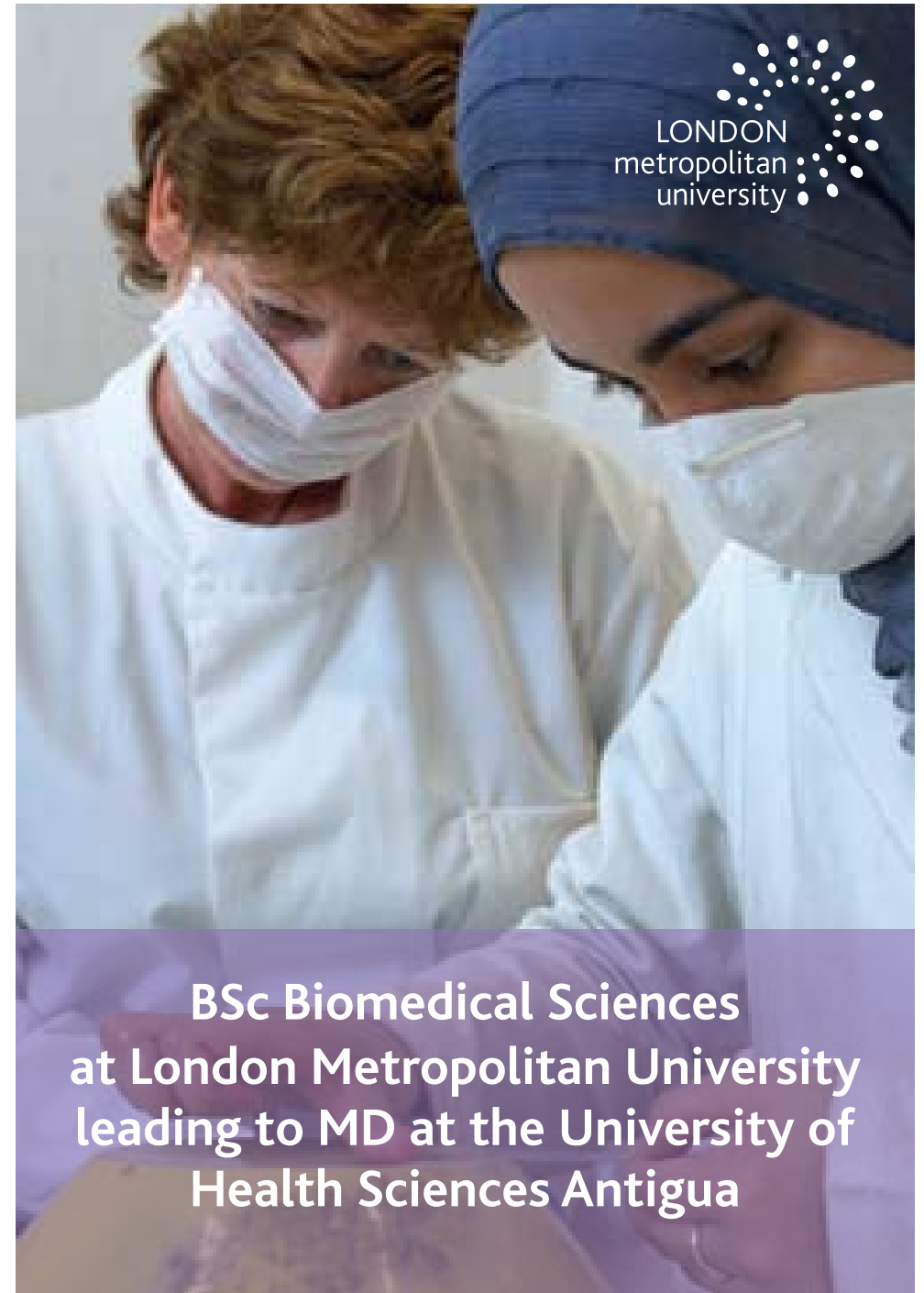




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**BSc Biomedical Sciences  
at London Metropolitan University  
leading to MD at the University of  
Health Sciences Antigua**

## London Metropolitan University – who are we?

London Metropolitan University is one of Britain's largest universities with over 37,000 students from more than 153 different countries and is committed to the delivery of academic excellence, vocational relevance and personal development. London Metropolitan University is a fully recognised state university in the United Kingdom (UK). It is recognised by Privy Council ([www.privy-council.org.uk](http://www.privy-council.org.uk)), and the Higher Education Funding Council for England ([www.hefce.ac.uk](http://www.hefce.ac.uk)).

The University is also accredited by the United States Middle States Commission on Higher Education (MSCHE).

The Department of Health and Human Sciences brings together the University's health related provision and the essential scientific discipline which underpins such provision.

### Research

The University works closely with the local community in tackling the major health inequalities that are inherent in the poorer parts of the inner city of London. The Institute of Brain Chemistry and Nutrition is pioneering work by the Mother and Child Clinic on Maternal Nutrition and its effect on birth weight and this has led to intervention strategies to help alleviate this problem. Other research areas are diseases in adulthood and membrane composition and cell function.

The Department of Health and Human Sciences is also at the forefront of work on the assessment of body composition and has state-of-art facilities for this. The Weight Loss Clinic works with overweight and obese subjects providing lifestyle advice relating to exercise and diet with a view to reducing obesity.

### The Science Centre

London Metropolitan University (London Met) has invested heavily in new facilities, including a £30 million Science Centre, which opened in November 2006. The Science Centre offers unparalleled facilities for teaching and research and also houses the 'Superlab', the largest teaching laboratory in Europe. The Superlab has 280 individual workstations, providing students with a cutting edge learning experience. All workstations are equipped with full computer and video facilities enabling students to develop scientific skills through interaction with teaching materials delivered via laboratory sessions, IT environments, problem-based and collaborative learning.

The facilities in the new Science Centre will provide students with the opportunity to develop understanding of the scientific basis of human activity by working with data that has unique immediacy and greater quality than is normally possible in university laboratories. For a virtual tour of the science centre, please see, [www.londonmet.ac.uk/science](http://www.londonmet.ac.uk/science)



## The University of Health Sciences Antigua – who are we?

UHSA is a privately endowed institution founded in 1982. UHSA is chartered by the Government of Antigua and Barbuda. The Dowhill campus, on which the University is located, is about 12 miles from the nation's capital, St John's. The campus is situated on fifty acres of land within the Historical National Park area of the English Harbour, Antigua, West Indies.



### The School

In 1983 the School of Medicine at UHSA was listed with the World Health Organisation (WHO) and this confers eligibility on the medical graduates of the University to take the United States Medical Licensing Examinations (USMLE). Such examinations are mandatory for all graduates of foreign and American medical schools for licensure to practice in the United States of America. UHSA graduates have a success rate of over 90% in passing the USMLE, thus enabling these graduates to practice medicine in the USA. In addition, UHSA graduates also have a high success rate in the Medical Council of Canada Qualifying Examinations (MCCQE), Canadian Medical Residency Training/Assessment Examination and the United Kingdom Professional Linguistics Assessment Board (PLAB). The above examinations are required in order to practice in the respective countries in the approved way.

### What we can offer you

Following agreement between the University of Health Sciences Antigua and London Metropolitan University we are offering a route leading to BSc Biomedical Sciences from London Metropolitan University and Doctor of Medicine (MD) from the University of Health Sciences Antigua (UHSA). You will register concurrently with London Metropolitan University on the Biomedical Sciences programme and the University of Health Sciences Antigua on the MD programme. On successful completion of

the BSc Biomedical Sciences and the basic science curriculum at UHSA, you will further undertake two years of clinical rotations (clerkships) to complete the MD degree from UHSA.

Should you wish to terminate your studies at the end of the Biomedical Sciences degree, you will be immediately employable in hospital laboratories, but if you complete both qualifications, you will be uniquely qualified in both medicine and the diagnostic and analytical laboratory services which underpin the practice of medicine and have an even greater range of employment opportunities available to you.

### Studying with us

To enable you to complete both the BSc and the MD, the curriculum of the two institutions is synchronized with students receiving instruction simultaneously from both institutions. Students will spend the first three years at London Metropolitan University culminating in the award of the BSc Biomedical Sciences degree.

Their studies will be supplemented via the Moodle E-learning system provided by UHSA. Students will also be required to attend three summer sessions at UHSA, one at the end of each year of study on the BSc Biomedical Sciences course.

A BSc in Biomedical Sciences will equip graduates for a laboratory-based career in Biosciences – in private or public health services, educational institutions and biotechnology industries which is growing world wide. The degree is accredited by the Institute of Biomedical Science (IBMS). The multi-million pound laboratory facilities at London Metropolitan University provide for the development of practical skills, and associated competencies appropriate to graduates in both biosciences and medicine.

### Practising Medicine

By fulfilling the BSc Biomedical Sciences with London Metropolitan University and the MD degree at UHSA, you will be able to practice as a medical doctor, which includes diagnoses, evaluation, treatment and research into the causes and cures of diseases.



## The BSc Biomedical Sciences course at London Metropolitan University

Biomedical Science plays a vital role in identifying disease, monitoring treatment and research into infectious disease and other pathologies. Core modules provide an understanding of the structure, functioning and analysis of biomolecules, cells, and tissues and body systems in health and disease. The course will provide you with a thorough understanding of pathological and non-pathological processes together with training in associated analytical and technical skills.

### Year One

The first year of the course will provide an overview of key areas; eight modules will be studied and assessed at London Met, as below. Students accepted on the route to the MD with UHSA will also have the opportunity to access online materials from UHSA which will further support the study of some of these areas:

- Cell Biology
- General Microbiology
- Data Analysis
- Professional Studies
- Molecular Biology and Genetics I
- General Biochemistry
- Human Structure and Function
- General Chemistry

At the end of the first academic year, students will attend a compulsory two-month Summer School at UHSA, where they will take the following courses and relevant practical classes:

- Patient, Doctor and Community
- Gross Anatomy/Embryology
- Histology
- Human Physiology
- Biochemistry
- Neuroanatomy

### Year 2

This year expands on the studies of key topics linked to core pathology and students will again take the eight modules listed below supported by online materials provided by UHSA to supplement the lecture delivery activities at London Metropolitan University.

- Metabolic Chemistry
- Modular and Cellular Pathology
- Microbial Physiology
- Bioethics
- Immunology
- Genetics II
- Haematology and Transfusion Science
- Project Preparation

UHSA second summer session courses:

- Human Physiology
- Medical Genetics
- Behavioural Science
- General Pathology
- Microbiology

### Year 3

In this final year of the curriculum for the BSc Biomedical Sciences students will undertake a compulsory year long research project and study modules that extend the pathology theme and further develop analytical and problem solving skills. Students will take a number of core modules as below and can choose from a number of optional modules. Again, students accepted on the route to the MD with UHSA are supported by online materials provided by UHSA to supplement the lecture delivery activities at London Metropolitan University.

- Clinical Biochemistry
- Developmental Systems and Pathology
- Medical Microbiology
- Principles of Pharmacology

*Suggested optional modules:*

- Bio-analytical Techniques II

UHSA third summer session courses:

- Immunology
- Medical Jurisprudence
- Systemic Pathology
- Pharmacology
- Physical Diagnosis
- Introduction to Clinical Medicine

### UHSA MD Program – Clinical Curriculum

On successful completion of the BSc Biomedical Sciences course (minimum of a final 2:1 grade) and on successfully completing the Summer Schools at UHSA, you will then undertake two years of clinical rotations (clerkships) in hospitals in the USA, UK or Puerto Rico. UHSA has well-established links with excellent teaching hospitals in these countries.

In the first clinical year students will undertake 48 weeks of core clinical rotations in the areas of:

- Internal medicine
- General Surgery
- Obstetrics and Gynaecology
- Paediatrics
- Psychiatry
- Family Medicine

This will form the foundation of the student's clinical educational framework, after which, students are then required to select and rotate for a further 30 weeks in sub-specialities of the core rotations. Students can select their clinical electives from the wide choice offered below.

Anaesthesiology	ENT	Orthopaedics
Cardiology	Family Medicine	Otolaryngology
Clinical Psychology	Gastroenterology	Pathology
Critical Care	Infectious Disease	Podiatry
Dermatology	Laboratory Medicine	Plastic Surgery
Neurology	Neurology	Respirology
Epidemiology	Nephrology	Radiology
Emergency Medicine	Ophthalmology	Urology

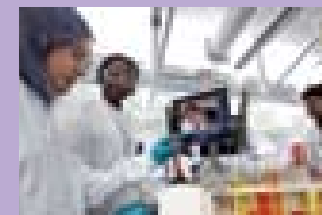
Examples of recent clinical rotation placements in the USA are: Harbour Hospital, Baltimore-Maryland; Memorial Medical Centre, New Mexico; Falmouth Hospital, Massachusetts; The University of Arizona College of Medicine Hospital; St Charles Mercy Hospital, Oregon-Ohio and Larkin Hospital Miami. In Puerto Rico, students have been undertaken clinical rotations at Hospital Santa Rosa, Guayama, Cristo Redentor Hospital, Guayama, San Pablo Hospital, Bayamon and the San Juan City Hospital, San Juan.

In the United Kingdom, UHSA students have undertaken clinical rotations at affiliated teaching hospitals of the University of Glasgow, University of Sheffield, University of Leicester, University College & Middlesex School of Medicine, University College of London; Eastbourne District General Hospital; Buckland Hospital, and Maidstone Hospital in Kent.

In Canada, UHSA students also have undertaken clinical rotations at the Greater Niagara Hospital, Ontario; St. Catharines General/NHS, Ontario; Hotel Dieu Hospital, Ontario; Southlake Regional Healthcare Centre, Ontario; Foothills Medical Centre, Alberta; North York General Hospital, Ontario; Scarborough Hospital, Ontario; Toronto General Hospital, Ontario and Bathurst Steels Medical Centre, Ontario.

UHSA is constantly adding to its clinical sites, so as to provide more options for the students.

Once the clinical rotations have been successfully completed you will then graduate with a Doctor of Medicine (MD) degree from UHSA.



## Costs

### Tuition Fees

#### UK/EU Students

London Metropolitan University – Tuition fees for the first 3 years of the BSc Biomedical Sciences degree are £3,290 per year. (Subject to an annual inflation increase).

University of Health Sciences Antigua (UHSA) – Tuition fees for the MD program are £5,000 per year. (Subject to an annual inflation increase).

#### International (Non-EU) Students

London Metropolitan University – Tuition fees for the first 3 years of the BSc Biomedical Sciences degree are £9,600 per year. (Subject to an annual inflation increase).

University of Health Sciences Antigua (UHSA) – Tuition fees for the MD program are £5,000 per year. (Subject to an annual inflation increase).

### Accommodation

Once applicants have been made an unconditional offer for the BSc Biomedical Sciences course they may apply for university accommodation with London Met, see [www.londonmet.ac.uk/directapp](http://www.londonmet.ac.uk/directapp) for details.



## UHSA Summer School Budget

### (UK/EU and International Students)

UHSA dormitories per month	£302
Private facilities per month	£504
Living expenses per month	£732 (Including transport, food and entertainment)
Return flight London-Antigua	£656-757

### UHSA Budget for the Clinical Rotation Years

UHSA is well aware that expenses vary greatly depending on individual situations and spending habits, however the budget provided below gives the estimated cost for two years required for the completion of the clinical portion of the combined program.

Tuition and fees	£15,225 per year
Accommodation	£8,300 per year
Food @ £504/per month	£6,048 per year
Pocket money@ £252/per month	£3,024 per year
Insurance @ £504	£504 per year
<b>Total</b>	<b>£33,101 per year</b>

For those graduating after their final clinical rotation year there is an additional Graduation Fee of £277 with return air transport costs to Antigua of approximately £750.



## Entry Criteria for the BSc Biomedical Sciences at London Metropolitan University and MD Program at UHSA

Applicants must have 300 points at A2 level from at least two A levels which must include Biology and Chemistry or equivalent. Applicants from the USA would need 3 passes in AP tests with a minimum of grade 4 overall and with a minimum of 5 in biology and chemistry, in addition to a minimum B+ average in their High School Diploma. Alternatively, students should have a minimum of 600 in the math and verbal sections of the SAT 1 plus a minimum of 650 points in SAT II in biology and chemistry.

Applicants from Canada generally will need a minimum of 70% overall for Grade 12 and a minimum of 75% in biology and chemistry.

Applicants from India would need to have an average of 65% in their year 12 exams and must have a minimum of 65% in both biology and chemistry.

For entry criteria for other countries and notes for guidance for applicants please email: [medicine@londonmet.ac.uk](mailto:medicine@londonmet.ac.uk)

Applicants who do not have English as a first language will need to take a recognised English Language qualification such as IELTS and obtain a minimum of 6.0 overall with no less than 5.5 in any component, or equivalent. Additionally all successful students will be interviewed locally in order to assess the commitment, motivation, understanding, maturity, preparedness and aptitude to study and practice medicine in addition to a high level of intelligence and academic achievement.

In order to facilitate the interview process, applicants' contact details will be shared with University of Health Sciences Antigua (UHSA). Applicants may be interviewed in person or by telephone by staff from both universities.

Applicants who wish to pursue this course but do not have a background in biology and chemistry may apply for a science foundation year at London Met. Successful completion of this year with a minimum of 65% overall will enable students to progress to the Biomedical Sciences course. Subject to a satisfactory Interview applicants will also be eligible for the route Including the MD course at UHSA.



## Accreditation and practicing in different countries

In Europe, and other parts of the world, colleges and universities including medical schools are recognised and accredited by Ministries of Education, and in essence by its governments.

UHSA is recognised and accredited by the Ministry of Education of the Government of Antigua and Barbuda where the University is located.

Inclusion in the World Directory of Medical Schools certifies that UHSA is recognised and accredited by its own national government as a bonafide medical school. Consequently UHSA students are eligible to take USMLE (USA), PLAB (UK), MCCQE (Canada) and the Canadian Medical Residency Training/ Assessment Examination.

Upon passing any of the above examinations, the graduates will be able to obtain a license to practice medicine in their respective country.

Since UHSA is listed in the World Health Organisation (WHO) graduates can practice in any part of the world including the USA, UK and Canada after passing the certifying examinations. However, individual countries have certain requirements that must be met before practicing.

Information regarding accreditation for specific countries is available at the UHSA's Dean's office.

## How to apply

This course has two entry points in September and February. Applicants for September must apply through UCAS ([www.ucas.com](http://www.ucas.com)) enter course code B900 and campus location U. The deadline for starting in September is the end of June. Applicants for the February intake should apply directly to London Metropolitan University quoting BSc Biomedical Sciences (UHSA/MD Program) as the course choice.

You can download an application form from [www.londonmet.ac.uk/directapp](http://www.londonmet.ac.uk/directapp)

Applicants who do not have a background in biology and chemistry can undertake the Foundation year in Science with London Metropolitan University, successful completion of which would allow students to progress to the BSc Biomedical Sciences. This course only starts in September and you should apply through UCAS [www.ucas.com](http://www.ucas.com) using the CF11 course code.

