Graduating Excellent Clinicians

Keele University Medical School, Keele University, Staffordshire, ST5 5BG. Tel: 01782 733632. Website: www.keele.ac.uk/depts/ms Contact Us: www.keele.ac.uk/depts/ms/ContactUs.htm
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Information provided in this brochure is accurate at the time of going to press (November 2009) but it may be subject to change. Please visit www.keele.ac.uk/depts/ or contact our admissions office for the most up-to-date details.

Acknowledgements:
A special thanks to all the staff and students who helped with this production.
On behalf of staff and students of the School of Medicine, I would like to extend to you a very warm welcome to our School. We believe that we offer an attractive combination of a new and distinctive curriculum, excellent educational and clinical resources conveniently located in the centre of the United Kingdom, and a friendly and safe environment where staff and patients have time to help students learn. The Keele experience is different from that of most medical schools in the UK because of our small size, our campus community and our location.

Medicine is a very diverse profession with an expanding range of possible career options. We believe that a degree from Keele, based on a strong grounding in the medical and social sciences, an understanding of the health care system and an appreciation of the health care needs of the population, will prepare you for this exciting future.

The Keele curriculum, which started in 2007, has the following features:

- Integration of basic science and clinical experience throughout the course
- A variety of learning approaches, including problem-based learning (PBL)
- Smaller student group sizes than most medical schools
- Early clinical involvement that anchors learning in clinical practice
- A balance of community and hospital based learning opportunities, drawing on the strengths of both
- Clinical placements across Staffordshire and Shropshire
- Substantial student choice outside of core material through selective and elective components
- A faculty-wide focus on interprofessional learning with other health profession students
- Opportunities to take an intercalated Masters degree after year 4 in a range of interesting and relevant health related fields. A more traditional intercalated BSc degree option after year 2 is also available.

It is important that you choose a medical school that provides you with the right balance of personal and professional development. Please think seriously about studying medicine at Keele and take some time to explore our website, come to our open days or telephone us with your queries.

Professor Richard Hays
Head of School of Medicine 2005 - 2009

Professor Val Wass
Head of School of Medicine from 2010
Get more information from:
www.keele.ac.uk
www.keele.ac.uk/undergraduate/prospectus.htm
www.keele.ac.uk/facs/health
www.keele.ac.uk/depts/ms
www.keele.ac.uk/depts/ms/overview.htm
www.keele.ac.uk/depts/ms/news
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www.keele.ac.uk/depts/ms/campus/campus.htm
www.keele.ac.uk/university/campus
www.keele.ac.uk/depts/aa/undergraduate/Virtual_Visit
www.keele.ac.uk/studyhere.htm
Our Facilities

Keele School of Medicine is spread across various sites in Staffordshire and Shropshire. The three principal buildings are located at the University main campus and at the University Hospital of North Staffordshire (UHNS) campus three miles away. There is also a substantial Medical School presence at our associate teaching hospital at the Shrewsbury and Telford Hospitals NHS Trust in Shropshire, at North Staffordshire Combined Healthcare NHS Trust, and developing facilities at Mid Staffordshire NHS Foundation Trust, and at the South Staffordshire and Shropshire NHS Foundation Trust at both Stafford and Shrewsbury. All medical students can expect to spend varying periods of time at all of these sites during their five years on the course.

The Medical School building at Keele campus was opened in September 2003, and contains everything that one would expect in a modern purpose-built facility, including a large lecture theatre, seminar rooms, IT laboratory, an anatomy suite, multi-user laboratories, a resource room, student common room and refreshment area. In addition to this the university provides library and information services in the nearby Information Services building.

At the University Hospital of North Staffordshire campus, there are two educational buildings - the Keele University Medical School (hospital campus) building, opened in 2003, and the Clinical Education Centre (CEC), opened in 2004. As well as the usual teaching rooms, the hospital campus provides clinical skills laboratories and a multi-professional Health Library.

At the Royal Shrewsbury Hospital, an existing building has been extended in order to provide the Learning Centre. It contains seminar rooms, a clinical skills laboratory, a student common room/resource room, and an integrated Health Library. These facilities were opened in August 2008. New living accommodation for students opened in August 2009 at the Shrewsbury site.

At Stafford, Mid Staffordshire NHS Foundation Trust has an excellent Postgraduate Medical Centre with a formal lecture theatre, several teaching rooms, and library facilities, which are all available to medical students. In addition, the development of another building on the site to add a common room, administrative office, teaching rooms, IT facilities and a skills laboratory, will enhance the existing facilities. Residential accommodation is also provided on site. The South Staffordshire and Shropshire Foundation Trust is also planning to develop dedicated space for Keele medical students at St George’s Hospital site in Stafford.

You can view short movies of life at Keele School of Medicine or take a virtual tour of the school on our website at: www.keele.ac.uk/depts/ms

The Keele approach to the medical curriculum

The MBChB Honours Degree at Keele University is designed to ensure graduates meet the necessary standards in terms of knowledge, skills and attitudes that new doctors should have. The curricular outcomes for undergraduate medical education are set out in Tomorrow’s Doctors (General Medical Council, 2009) and the principles of professional practice as set out in the GMC document Good Medical Practice (GMC, 2006). See: www.gmc-uk.org

These are:
- Good clinical care - Doctors must practise good standards of clinical care, practise within the limits of their competence, and make sure that patients are not put at unnecessary risk
- Maintaining good medical practice - Doctors must keep up to date with developments in their field and maintain their skills
- Relationships with patients - Doctors must develop and maintain successful relationships with their patients
- Working with colleagues - Doctors must work effectively with colleagues (from all health and social care professions)
- Teaching and training - If doctors have teaching responsibilities, they must develop the skills, attitudes and practices of a competent teacher
- Probity - Doctors must be honest
- Health - Doctors must not allow their own health or condition to put patients and others at risk.
The Keele curriculum is a modern, highly-integrated medical curriculum. It combines a range of learning strategies including problem-based learning, early clinical experience, integrated communication and clinical skills teaching, lectures, seminars, practical sessions and clinical placements in major specialties. The medical curriculum integrates biomedical, behavioural, social and clinical sciences, healthcare delivery and professional developments. Integration occurs at all levels and is guided by five themes.

Themes:
The five themes running through the whole course are:
1. Scientific basis of medicine
2. Clinical, communication and information management skills
3. Individual, community, and population health
4. Quality and efficiency in health care
5. Ethics, personal & professional development.

There is a phased integration of basic science and clinical experience throughout modules 1, 2 and 3, with increasing exposure to clinical practice throughout the course.

Interprofessional learning will occur at several stages, commencing in module 1 with a series of interprofessional group activities involving medical, nursing, pharmacy and physiotherapy students at Keele. These sessions promote mutual understanding of roles and effective collaboration, both essential to developing the professional teamwork required in modern, high-quality health care. Interprofessional learning in more senior years will involve collaborative clinical assessments and working with students on other health profession courses.

Diversity of student interest and career options is fostered through the Student Selected Component programme. During each academic year of the course, students are offered a choice of learning experience that allows either breadth (including exposure to wider areas of clinical practice but also the opportunity to learn within the context of, for example, the Arts and Humanities) or depth (more specialist clinical experience). Over the whole five years students will be able to gain a diverse range of such experiences, building on natural aptitudes and providing a basis for future career interest.

Further opportunities for diversity are encouraged through intercalation.

The overall structure of the course comprises five compulsory modules taken over five years (see chart on the next page).

Learning and Teaching methods
The programme is based on a 'hybrid' approach that uses many methods.

Key Features:
• Themes are present in each module/year
• Students will be allocated to a ‘study group’ each year for modules 1-3
• Of the forty expected study hours each week, approximately half are devoted to independent and group study
• Maximum of five to six lectures each week
• Emphasis on practical sessions, including anatomy and laboratory sessions
• Clinical, communication and information skills start early in module 1
• Approximately 20% community-based experience throughout the course
• Problem-based learning (PBL) with groups of about twelve in modules 1-2
• Small case-based learning groups in module 3, and case-illustrated learning in module 4
• Each week in modules 1-2 ends with an ‘integrating’ event, e.g. debate, panel presentation, clinical case presentation and Clinico-Pathological Cases (CPCs)• In modules 3, 4 and 5, students work in smaller groups or pairs, based in a variety of clinical settings.
<table>
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<tr>
<th>Phase</th>
<th>Year</th>
<th>Module title</th>
<th>Units</th>
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| 1     | 1    | Challenges to Health                | Emergencies, Infection and Immunity, Cancer, Ageing, Lifestyle, Complex Family (6 x 4 wks)
|       |      |                                     | Student selected component (SSC)                                      |
| 2a    | 2    | Integrated Clinical Pathology 1     | Inputs and outputs (8 wks)                                            |
|       |      |                                     | Movement (4 wks)                                                       |
|       |      |                                     | Life support and Defence (8 wks)                                      |
|       |      |                                     | Sensation (4 wks)                                                     |
|       |      |                                     | SSC                                                                  |
| 2b    | 3    | Integrated Clinical Pathology 2     | Surgical patient, Medical patient 1, Young patient, Elderly patient, Medical patient 2, Mental health (6 x 4 wks)
|       |      |                                     | Consolidating clinical skills (4 wks)                                |
|       |      |                                     | SSC (2 x 4 wks)                                                       |
| 3     | 4    | Advanced Clinical Experience        | Surgery, Child health/Mental health, Women’s health, Integrated medical practice 1, Integrated medical practice 2 (6 x 8 wks) |
|       |      |                                     | SSC (4 wks)                                                           |
| 4     | 5    | Preparation for Professional Practice | Medicine in the community (primary care, home care and community hospitals; covering adult, child, mental, women’s and men’s health and aged care; following patient pathways) (15 wks) |
|       |      |                                     | Acute and critical care (emergency medicine, intensive care unit, anaesthesia) (5 wks) |
|       |      |                                     | Surgical student assistantship (5 wks)                               |
|       |      |                                     | Medical student assistantship (5 wks)                                |
|       |      |                                     | Distant elective/project (8 wks)                                     |

This diagram is an indication of course content and some of the detail may change.
The assessments have two main aims: firstly to help students achieve the learning objectives of the course (formative) and secondly to certify those students who have achieved those learning objectives (summative).

Formative assessment is a key, integrated component of the course and there is regular, web-based material on which you can assess your understanding. These assessments will reinforce what you need to know, reassure those students who are on track and point out any areas which require extra study. They will help to guide you in your professional development. You will meet all different methods of testing in this formative way before you encounter the same method in a summative examination.

We use a variety of different testing methods at Keele. We will test your ability to apply knowledge with written methods such as Multiple Choice Questions, Extended Matching Questions and Key Feature Problems. We will examine your ability to comprehend a medical text and paraphrase it in lay terms. From an early stage in the course we will examine your practical and clinical skills in the laboratory and clinical arena. These tests include OSSEs (Objective Structured Skills Examination) and OSCEs (Objective Structured Clinical Examination). You will have an opportunity to learn and practise these skills and receive feedback throughout the learning year and prior to the summative exams.

You will keep a portfolio detailing the development of your clinical practice including your reflections on the new situations that you encounter. This will be linked to appraisal. You will also participate in Multi-Source Feedback that will help you understand how you perform as a team member and to assist you in developing professionalism.

In the final year of the course (module 5), most of the assessments will be "real life" examinations of your clinical performance. This will help both us and you to know that you are ready to take on the role of a Foundation Year doctor.
Pupils from schools and colleges can visit the School of Medicine and take part in activities on a number of occasions throughout each year, including the Medical Summer School and the annual Faculty of Health Widening Participation Event. There are also times when careers advisors are invited to visit and get the latest information about admissions. There are two areas of our website where you’ll find further information on these:

The Widening Participation team
www.keele.ac.uk/depts/aa/widening

The Schools and Colleges Liaison team
www.keele.ac.uk/facs/health/scl

Royal Society of Medicine Careers Day

For the eighth year running we will be hosting the regional Royal Society of Medicine’s Careers Day for students in years 10-12. This conference, “So You want to be a Doctor?” is planned to take place at our building on the Keele University campus on Wednesday 17th March 2010.

For further information and to book your place please see our website:
www.keele.ac.uk/depts/ms/news/rsm.htm

Open Days

The university open days in 2010 are Sunday 13th June and Sunday 22nd August. The university campus will be open to all visitors and the Medical School will be open for prospective Medical School applicants and their families. For further details and to book your place please see:
www.keele.ac.uk/depts/ms/news/open-days/opendays.htm

Visit Days

Students who receive an offer to study at Keele University are invited to attend one of our Visit Days in February and March. The aim of the Visit Day is to help applicants make a more informed choice of where to study by enabling them to find out more about the university and the medical curriculum, view our facilities and to meet staff and students.

For further information and to book your place please see our website:
www.keele.ac.uk/depts/ms/news/msm.htm
The Keele curriculum is a brilliant balance between problem-based learning and lectures. The guidance from the lectures facilitates the independent and group learning opportunities in PBL. The first year incorporates some clinical skills, preparing you for the second year, which has a larger clinical aspect. There is time to learn about history taking, specific clinical examinations, and an opportunity to practice these on placements in a range of clinical settings.

All the facilities within the medical school are modern, and range from a fully equipped IT suite to fantastic anatomy resources. The staff are excellent and always willing to help if there is anything you need.
Although one of the hardest years, my fourth year was one of the most enjoyable. We moved on to learning the specialties, but not forgetting the general medicine we had studied in previous years!

I particularly enjoyed orthopaedics. Their camaraderie, approach to teaching and enthusiasm for their subject was second to none and certainly encouraged me to learn about the subject. Rheumatology was another specialty I enjoyed. It answered a lot of questions and emphasised the importance of good history taking, especially with regard to how certain conditions affect the whole body.

Neurology was initially very daunting but proved to be very interesting. Again the clinical teaching was well thought through. We were able to see and demonstrate clinical signs during the examination of a patient.

Another aspect of the fourth year I particularly enjoyed was the research project, an eleven week period where we worked in a department of our choice.

The projects ranged from clinical audits to lab-based research. I was fortunate enough to join the Stroke Research Team where I was involved in the pre-clinical testing of a new treatment for ischaemic strokes. The project was challenging, but exceptionally rewarding and gave me a great insight into how treatments used in medicine are developed. My supervisors were very supportive and encouraged me to submit my work for presentations and to journals. I was very fortunate to get some of my work accepted by the UK Stroke Forum where I will present it later this year.

Although there was a lot of work, I did my utmost to keep up my extracurricular activities. This was more important in this year than any other. They provided a much deserved break from medicine, encouraged good time management, and allowed me to be the same person who got into medicine in the first place.

What spurred me on was the fact that the finish line was in sight. Only one more year and all this hard work would be rewarded and I would finally be a doctor.
Being a student at Keele Medical School for the past few years has been an extremely enjoyable experience. The course is well structured and problem-based learning allows students to facilitate their own learning, as individuals and as part of a team.

The staff at the Medical School are extremely friendly and approachable, making the atmosphere inviting and perfect for learning. I would recommend Keele Medical School to any student who loves medicine and has a passion for learning.

The campus here is lovely. There is quiet countryside right on your doorstep, but you are still close enough to town for everything you need, including a good night out!

Having the opportunity to study in Shrewsbury during the early stages of my clinical years provided me with an excellent foundation to build my career in medicine. The library and computer resources in Shrewsbury were excellent and the staff were very friendly. We had a really high standard of teaching, which included lectures and bedside learning. The whole approach adopted by the teaching doctors was very well organised, with the aim of maximising teaching opportunities for medical students.

There is a lot to think about when choosing a medical school. The course at Keele blends the best from all the different teaching styles without being dogmatic about any particular approach. There are also lots of opportunities for contact with patients in different healthcare settings. The facilities are modern and purpose-built within easy walking distance of student accommodation on the university campus.

Medicine is personally challenging. You will find that on occasions the course will take you out of your comfort zone. It’s then that I have really appreciated the small group sizes and the support available. This comes from both the high ratio of staff to students and the hard to define ethos of Keele Medical School. Keele is a relatively small campus university, which has a distinctive and genuinely friendly approach. My first year was academically intense, rewarding, and a significant step forward from A-levels.

I enjoy playing sport especially at the golf course next to the university. I also eat vast amounts of chocolate cake without putting any weight on. This may be unique to Keele medics; don’t try it at home.

I hope that you come to an Open Day to experience Keele and see whether you agree with me.
When deciding upon which university to attend, Keele had always been my top choice. The teaching style of PBL in small, well-supported groups is one of its main advantages, as it gives you the opportunity to build your teamworking skills, as well as improving your self-directed learning, whilst being supported by lectures to help give you the depth of knowledge needed to be successful on the course.

The early clinical experience and patient contact in a variety of healthcare settings really helps familiarise you with the reality of medicine and gives you a chance to put the theory to use right from the word go.

The facilities at Keele have been purpose-built for the medical course and are brand new and really well equipped. The campus itself is a genuinely friendly place, and somewhere you can go to get tranquillity, while still being near enough to town.
What initially attracted me to Keele were the modern teaching facilities, particularly the Clinical Education Centre (CEC) and the pioneering technologies available to students to facilitate their learning. The medical school’s main assets in my opinion are its staff, anatomy teaching and resources, and problem-based learning. Having been out of academia for over five years, being able to discuss and share findings with colleagues under the guidance of a tutor gradually boosted my confidence with regard to succeeding on the course. The staff at the medical school are ever willing to tutor you on a one-to-one basis. Their genuine interest in your progress and welfare are unrivalled.

I’m really enjoying my clinical years and a lot of that is because of the abundance of exposure to patients that you get quite early on in your training. The medical school, in conjunction with the hospitals, has a sign-up system which allows you to learn more about an aspect of medicine that you may be unfamiliar with or need to develop more confidence in, ranging from specialist clinics to surgical procedures. There are more sign-ups than you can do in your time here!

I am currently on a paediatric firm at Royal Shrewsbury and Telford Hospital Trust in Shropshire. I have to admit, I was worried about clinical exposure and how I would get on as a city lad in a rural setting! I am pleased to say that so far, my worries have been unfounded. Excellent bedside teaching, lovely hospital staff, helpful admin staff and first-class student accommodation more than make up for the quieter surroundings.

My experiences so far have reassured me that I will be well equipped by the end of my training for my first job as an F1.
One minute you are celebrating at graduation after five years of study- ing and the next you are flung into the world of work where you are responsible for thirty patients. Scary but exciting stuff!

Keele Medical School uses a combination of PBL, lectures, practical sessions and clinical placements to great effect. Through this training I was provided with a good theoretical knowledge base as well as exposure to a wealth of clinical scenarios and disease processes. This prepared me well for many situations I encountered in my first few weeks at work.

During my time at Keele I had the chance to spend time in hospitals in Stafford and Shrewsbury, as well as the University Hospital of North Staffordshire. Teaching standards were very high and I was welcomed by all staff members who were keen to get students involved in the day-to-day running of the wards. This served as an excellent opportunity to refine practical skills and procedures and to continue to improve basic skills, such as examining different body systems and history taking. All of these skills I now utilise on a daily basis.

I am now in my Foundation Year 1 post and enjoying life as a junior doctor. I particularly enjoy being able to teach medical students when I have a spare few minutes as I found shadowing them helpful when I was a student. Working as a junior doctor on vascular surgery is hard work, but despite the long hours and many bleeps, asking for patients to be reviewed, clerked or prescribed medication, it is very rewarding to go home each night knowing I have potentially made a difference to patients’ lives.
Initially, on choosing my A-levels, I had wanted to pursue a career in Sports Science and chose appropriate A-levels to help gain a place at university for a Sports Science degree course.

Half way through my A-levels, circumstances changed and I changed my mind about what I wanted to do in the future. I had started a care assistant job and began volunteering. This showed me I had a passion for helping people and I decided I wanted to become a doctor.

Knowing I hadn't done the right A-levels, I researched alternative methods of entry into medicine. I found the Foundation Year at Keele and the new course design and the opportunity for a year of chemistry and university experience appealed to me more than the access-to-medicine courses available.

During the year I enjoyed a wide range of subjects including chemistry and biology, whilst also gaining valuable experience of the more personal modules including communication skills, where we had the chance to experience working with simulated patients in an interview setting. This helped me immensely on the first year of my degree when I was out on placements.
I graduated from the University of Nottingham with a degree in Biochemistry. Having always wanted a career in medicine, I researched the graduate entry programmes at many universities but Keele stood out. Most graduate programmes stand alone and don’t involve the undergraduates, whereas at Keele, graduates enter directly into year two and follow the course alongside the undergraduates. The course at Keele is designed to cleverly integrate both the bioscience aspects and the clinical aspects throughout the course, with increasing amounts of time spent on the clinical aspect as you progress. Anatomy is emphasised, and Keele is one of now very few medical schools who teach with the use of cadavers.

The course at Keele is different to many others as it is PBL-based but also has a good balance of lectures, labs, communication skills and placements. Having studied a degree in a lecture-taught style, it was quite an adjustment for me to learn via PBL, but the clever design of the Keele curriculum made it easy to adjust.

The early clinical exposure that you get at Keele stood out for me too. From day one you are able to attend placements at varying clinical environments. As a graduate entrant I was a little worried about being behind in areas such as communication as I had never been taught the specific skills required for a clinical situation. However, I soon found myself working at the same level as my peers due to a catch-up session in the graduate-entry induction period and also through the way in which communication is taught via a feedback method, allowing you to identify your own strengths and weaknesses.

As a graduate entrant, you are essentially cramming two years into one at Keele, which I have found to be tough, but I’ve had lots of support from my peers and from the teaching staff. I have thoroughly enjoyed my first year at Keele Medical School and I can’t wait to progress to years 3, 4 and 5, all of which are clinically based at the hospitals in the locality. The best quality that Keele School of Medicine possesses is that it produces all-round excellent doctors. I would highly recommend Keele to all graduate entrants.
HEALTH FOUNDATION year

The Health Foundation Year for Medicine at Keele University was established to provide an alternative entry route into the 5-year medical degree programme for students who have the right level of qualifications but are without the chemistry or biology A-levels that entry to the 5-year medicine course requires. The course is also open to students with other level 3 qualifications and to graduates with non-science degrees.

The first Health Foundation Year students joined us in October 2006. A good blend of students join the course each year, with varying backgrounds, nationalities, and reasons for wanting to study medicine: for example, some come with nursing backgrounds, some with non-science degrees, others with humanities A-levels.

Students follow academic modules related to the principal medicine course which they will join once they have completed the year successfully. The year also offers training in generic transferable skills including communication skills, counselling skills, IT and numeracy.

GRADUATE ENTRY programme

The Graduate Entry Programme blends graduates into the medical curriculum at the start of module 2, giving you the opportunity to complete the degree in four years instead of five. You’ll be taught alongside medical undergraduates, but with additional course content and self-directed learning based on a learning needs analysis to help bridge any gaps in experience.
Opportunities for Student Selected Components (SSCs) occur in each module of the undergraduate medical degree. Each SSC is intended to help you gain core learning skills and broaden your knowledge in an area that is of particular interest to you (which may or may not be part of the core curriculum), thereby exploring potential career options and personal interests. You’ll work closely with an SSC supervisor who can help you make the most of each opportunity.

“The elective is a chance to either experience an area of medicine that interests you, or to observe medicine in another health care system. I took the opportunity to explore New Zealand (which meant I didn’t have a lot of relaxing weekends as there is so much to see!), taking time to view New Zealand from above (in a 15,000ft freefall) and learning the words and translation for the famous “Ka Mate!” Haka, which is performed by the All Blacks before their matches.

Despite all the excitement I took the opportunity to explore New Zealand (which meant I didn’t have a lot of relaxing weekends as there is so much to see!), taking time to view New Zealand from above (in a 15,000ft freefall) and learning the words and translation for the famous “Ka Mate!” Haka, which is performed by the All Blacks before their matches.

The elective is a once in a lifetime opportunity to live and work in another culture before starting work as a Junior Doctor, and allows each Medical Student to gain the most from their experience, however and wherever they choose to do it.”

Ben Hockenhull

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<tr>
<th>Module</th>
<th>SSC Focus</th>
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<tbody>
<tr>
<td>1</td>
<td>A three week literature review. You’ll choose either a topic from a list or generate your own with guidance from your SSC supervisor.</td>
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<tr>
<td>2</td>
<td>Sixteen half days throughout the year involved with a local organisation within the health or social care field. The organisations provide for a wide range of needs, from people with mental health problems or learning disabilities to homeless people, asylum seekers and refugee families.</td>
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<tr>
<td>3</td>
<td>Two blocks of four weeks where you choose from three types of SSC - * case reporting - using a self-selected clinical attachment to give all round exposure to a clinical area, resulting in a case report * study in the humanities - being attached to a humanities-based module * research basics - for those who are contemplating a career in research or academic medicine. Hands-on experience of how to develop research ideas, formulate ideas into projects, write up results, and argue for funding for your project. Run by the Arthritis Research Campaign’s National Primary Care Centre at Keele. For more information on research career pathways see page 25.</td>
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<tr>
<td>4</td>
<td>A four week block of clinical career exploration. Investigating postgraduate training, career pathways and life as a consultant within an individual clinical specialty. Spending time with junior doctors, middle-grade specialist registrars, and consultants, to help inform career choices.</td>
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<td>5</td>
<td>An eight week elective to shadow a specific medical topic of personal interest in a different health setting (possibly, but not necessarily, overseas). This is a period of maximum flexibility where students will be encouraged to study any topic of interest to them that has relevance to medicine.</td>
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About a third of medical students in the UK add an additional year to the five-year undergraduate course in order to study a subject of their choice in greater depth. Students at Keele University School of Medicine can opt to take a year out of their medical studies after module 4 (MSc level) in order to study a subject area in greater depth, before returning to complete the medical course. At graduation, you would be eligible for the award of two degrees - the MBChB and another for the additional year of study.

Why do an intercalated Masters degree?
An intercalated Masters degree provides you with an opportunity to get a better understanding of basic biomedical sciences, medical humanities, research methodologies and/or to pursue an additional qualification in a subject that interests you. This may help you make informed choices about specialisation later in your career, particularly if you want to pursue a medical academic career. Other benefits could include the improvement of long-term career prospects, as you’ll have had the opportunity to gain key research skills, publish scientific papers and give presentations at scientific conferences.

What are the intercalated Masters degrees on offer at Keele?
• Molecular Parasitology and Vector Biology
• Biomedical Engineering
• Cell and Tissue Engineering
• Medical Ethics and Law
• Ethics of Cancer and Palliative Care
• Ethics of Medical Research and Biotechnology
• MPhil Primary Care Sciences
• MRes Medical Humanities
• MMed Sci (all streams)

For further details please see: www.keele.ac.uk/depts/ms/undergrad/intercalated_degree.htm

“After year four I intercalated to complete an MPhil, in conjunction with the primary care research institute, which is recognised internationally. Most intercalated degrees are offered as a BSc, but Keele wanted to encourage intercalation at Masters level and were incredibly helpful in organising this project for me.”

Sam Creavin
Every medical student at Keele has opportunities to learn whether research is something they may want to do as a doctor, but the School of Medicine also offers an innovative research pathway. This is designed to set you firmly on the road to a career which combines clinical work with patients and the exciting and stimulating world of medical research. The research pathway includes a range of opportunities for medical students and early-career doctors to enrich their clinical experience and CVs, at various stages of their medical training. It is designed to find students and young doctors who want to develop a track record in research and to encourage and develop the medical researchers of the future.

Pathway Step 1 - Student Selected Component

Students can get early exposure to research methods during their module 3 Student Selected Component (SSC). See page 23 for more information about SSCs. This type of SSC can be done as a stand-alone component or can form a useful lead in to an intercalated degree after module 4.

Pathway Step 2 - Intercalated Degrees

Depending on the course selected, these degrees can be primarily taught or have a major clinical or experimental laboratory research component; they will provide modules in a range of research-related and clinical topics, and can offer the exciting opportunity to develop, carry out and publish a piece of research with a top group at Keele. Even if you decide at the end of the year that research is not for you, the experience and qualification gained will make an important contribution to your CV. See page 24 for more details of the intercalated degrees on offer at Keele.

Pathway Step 3 - Academic Foundation Programme

After successful completion of your medical degree you’ll start your Foundation training. Keele offers a small number of Academic Foundation programmes that provide the opportunity for research experience integrated into the clinical jobs in Foundation Year 1 and 2. Although most of the Foundation experience is clinical, the Academic programmes offer a great stepping stone for doctors developing a research track to their career. You’ll have the opportunity to develop research projects linked to clinical experience in Foundation posts and to build on research training gained from earlier steps in the research pathway.

Pathway Step 4 - Special Training and Research

The next stage after the Foundation years is a period of specialist training to be a consultant or general practitioner. For doctors who didn’t take an intercalated Masters during their undergraduate years, the Postgraduate Department of the School of Medicine supports the option to complete a Masters degree at this point. For doctors who have decided on a research track, Keele hosts a number of attractive Clinical Training Fellowships. These support doctors in extending their specialist training period to develop ideas for a research degree such as a PhD or MD.

With a PhD or MD, you will then have moved from Keele’s research pathway and be well on your way to a rewarding career in medical research.
Over ninety percent of healthcare is provided in primary care and other community settings. Learning in these settings is therefore an essential element of the course.

In the first module of the course students have placements in general practices where they start to develop their clinical interviewing skills.

During their second module students select a “third sector” community placement from a wide range of community organisations and projects, charities and voluntary bodies. These placements give students a broad perspective of community health care and an opportunity to learn about the experiences and needs of their future patients.

In the third module, students have a full-time Clinical Skills Consolidation placement in a general practice for four weeks.

In the fourth module, students will have five one-week placements centred in general practice as part of an innovative Higher Consultation Skills block. This will provide key learning in support of the core objectives of the year, which are to assist students to develop skills in diagnosis, therapeutics and patient management.

In the final module they will have a long placement in a general practice, assisting them to integrate their knowledge, skills and attitudes in preparation for their first years of work.

Finally, they will have additional opportunities to work in the community and primary care on student selected components.

Community placements and teaching practices can be found in urban, semi-rural and rural areas of Staffordshire and Shropshire, giving students a wide experience of healthcare in different community settings. In teaching practices students will work with doctors, district nurses, other community health workers and patients. They will learn how health and illness affect the individual, family and community, and how illness presents, is diagnosed and managed. Students will understand the patient's journey from health to illness to recovery or continuing care from their home through primary care to hospital and back to the community.

www.keele.ac.uk/depts/ms/undergrad/community/community_info.htm
Clinical placements naturally form a very important part of the undergraduate medical curriculum. We use a wide variety of hospital settings in Staffordshire and Shropshire. More information is available on our website.

www.keele.ac.uk/depts/ms/overview.htm
We recognise that some student doctors may have difficulties at some stage of their training. There may be a difficulty with work in the course, with adjusting to the expectations of how a doctor should behave or personal problems, such as health, money or relationships.

Keele University School of Medicine has its own student support service to build on its reputation as a provider of a friendly, supportive environment in which to study medicine. This service has been highly commended by the GMC.

The student support team will be pleased to help with a wide range of issues and support is available on an individual basis at the university and all major hospital sites.

There are also other sources of support, guidance and advice beyond the Medical School to which you may be referred as appropriate with your consent or which you can contact yourself.

At Keele, these include: Counselling, Health Centre, Learning Support and Academic Guidance, Disability Services, English Language Unit, Independent Advice Unit and Student Support. There is also a free counselling service at the University Hospital Trust, which students may utilise.

More than ever, today’s medical students need a clear understanding of the career options a medical degree offers, the pathways of different medical careers, and to realise that there is little time after graduation in which to test their suitability for different types of medical careers. In recognition of this, Keele is developing a career support programme that has been designed to specifically target the needs of students in each year of medical school. The content has been informed by feedback from students, the Keele Medical Student Career Committee and faculty staff to maximise the benefit that students gain from these important sessions. Indicative content of the career programme includes: one to one support with CV building, specialty-specific sessions detailing training and work in individual specialties, group sessions to assist with junior doctor job applications, sessions to help students to identify their strengths/weaknesses and to associate these with potential future careers, and an annual career fair. There is a dedicated Career Lead whom students are free to contact with individual requests, feedback and suggestions for future sessions and further career-related information is available on the KLE online learning system.

The KMS (Keele Medical Society) was established in 2002 by the first group of undergraduate students to come to Keele University. In keeping with other medical school societies around the country, the committee members of KMS are elected at the beginning of each academic year. Third year students usually form the main body of the committee, but there are also representatives from the other four years which are elected by their year group, participate in meetings and raise issues on behalf of their peers.

In addition to this Keele students are involved in contributing to a range of local and national student groups and societies such as the Junior Association for the Study of Medical Education (JASME), the Inter-School Committee of the BMA, the Surgical Society, Medsin, and the Medical Careers Committee. These societies are involved in a range of activities and events, from attendance at national committee meetings representing student opinion through to organising events such as summer balls and careers events.
TUITION FEES and bursaries

In line with Keele’s standard fee for all undergraduate courses, the 2010/11 tuition fees for medicine were £3,290 per year for Home and EU students. Tuition fees generally increase each year in line with inflation. Usually, students take out a tuition fee loan from the Student Loans Company who will pay your fees directly to the university. You do not see the money and you do not have to repay the loan until after you have graduated. In addition, there are maintenance grants for students whose family income is below a set threshold and loans for maintenance are also available.

There are many good web sites which will give you advice about funding a degree. Some of them will be shown in the ‘useful links’ section of our own website. To start with, you could read the general information about student funding and eligibility at: www.aimhigher.ac.uk/student_finance

Bursaries and scholarships

The latest information about bursaries and scholarships available from Keele University can be found on the website at: www.keele.ac.uk/bursaries

NHS Bursaries

5 Year MBChB Programme (A100)

English domiciled medical students will be eligible for means-tested bursaries and help with tuition fees from their fifth year of study and beyond. In addition, these students will be entitled to apply for reduced rate student loans from year five of their course. Students receiving NHS bursaries will have access to student loans for the balance of their maintenance costs. Scottish, Welsh and Northern Ireland domiciled students may have slightly different arrangements, and you are advised to consult the NHS Student Awards Unit in your area.

4 Year Graduate Entry Programme (A101)

From year 2 of their training, English domiciled students are eligible to apply for means-tested NHS bursaries to help cover their day-to-day living expenses. In addition the NHS will pay the personal tuition fee element and students are still eligible to apply for a reduced rate student loan from their LEA.

Please visit the NHS Student Bursaries website at: www.nhsbsa.nhs.uk/students for up-to-date information about the bursaries available when studying medicine.

Living costs

Accommodation costs for students on a 33-week let (which excludes the Easter vacation) typical for year 1 are in the region of £2,390 - £3,467 depending upon the type of room (2009/10 costs quoted). All accommodation occupancy periods include the Christmas vacation period. In years 3 - 5 the teaching period is much longer and students will require a longer letting period. Medicine is a course which requires a lot of dedication and study, often with early teaching sessions, and you’ll therefore be expected to live locally. You’ll also need to budget for food, books, and the travel costs associated with clinical placements throughout the five years of the course. White coats for lab work and a stethoscope are necessary.

For details of University accommodation please see: www.keelefm.co.uk
After graduation from an approved degree programme, medical graduates apply to the General Medical Council (GMC) for provisional registration. It is then the responsibility of the GMC to check a candidate’s fitness to be registered. Please see the GMC website at: [www.gmc-uk.org](http://www.gmc-uk.org) for more information.

After satisfactory completion of the first year of postgraduate training, graduates achieve full registration with the GMC. The learning objectives of the first year of the Foundation Programme are set by the GMC. At the time of print, the responsibility for setting the standards for the second year of the Foundation Programme and for further postgraduate training falls upon the Postgraduate Medical Education and Training Board (PMETB).

All new medical graduates in the UK should undertake the Foundation Programme. These programmes are run by Foundation Schools which cover geographic areas (such as Staffordshire). The Foundation Programme runs nationally but delivery may differ a little between Foundation Schools. The usual model is to undertake six four-month attachments in different specialties over two years to attain a wide range of competencies. There is opportunity for students to choose the geographical location in which to undertake their Foundation Programme as well as some choice of specialties. However, applications are competitive so first choice locations and specialties are preferentially given to the better candidates. For more information on the Foundation Programme please see: [www.foundationprogramme.nhs.uk](http://www.foundationprogramme.nhs.uk)

Applications to the main Foundation Programmes occur at the beginning of year 5. Help is provided in applying for these posts by the Careers Liaison Coordinator, who has strong links with the Postgraduate Foundation Schools. Locally, the West Midlands Workforce Deanery is active in supporting trainees in the West Midlands to pursue their suited career and the career pages of the website contain details and podcasts of careers in various specialties. See: [http://workforce.deanery.westmidlands.nhs.uk](http://workforce.deanery.westmidlands.nhs.uk)
Medical students at UK medical schools who are from overseas and do not have right of residence must check how the latest information on visa requirements affects their postgraduate training period. Please see the UK Border Agency website: www.ukba.homeoffice.gov.uk

N.B. Information about medical careers after graduation is correct at the time of going to press. For up to date information please visit: www.mmc.nhs.uk

“After graduation from Keele in July 2006, I did my clinical training at the University Hospital of North Staffordshire and surrounding GP practices. It is important in medicine to keep your CV active, so I undertook a number of audits during my clinical posts, some of which have resulted in publications in journals and/or presentations at meetings and conferences. I have also been lucky enough to obtain both an Academic Foundation Year 2 post and later the Academic Clinical Fellowship for General Practice Specialty Training. Both these posts have enabled me to undertake research within the Arthritis Research Council National Primary Care Centre which I hope to take forward through Masters level studies to a PhD. Following the publication of my first book which I co-authored as a medical student, The Medical Student Career Handbook, I have continued to work in the field of medical careers, trying to improve local career support for medical students. Keele University School of Medicine has been an excellent springboard to enable me to successfully pursue my clinical, academic and personal career goals and I continue to enjoy the links I have forged with the Medical School over the years.”

Elizabeth Cottrell
HOW to APPLY

Application Procedure and Entry Criteria

All applications must be made through the Universities and Colleges Admissions Service (UCAS - www.ucas.com) by the relevant deadline, both for applicants wishing to enter the following September and for those wishing to defer.

Courses available

At Keele we have three main routes available for entry to the Medicine degree.

Applicants should note that they may be eligible to apply for more than one route. Those wishing to do this must use separate choices on their UCAS form for each.

All applicants should check whether they meet the minimum academic criteria for the course which they wish to apply for. Please see our web pages for the most up-to-date list of acceptable qualifications: www.keele.ac.uk/depts/ms

<table>
<thead>
<tr>
<th>Medicine Degree</th>
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<tbody>
<tr>
<td>5-year Bachelor of Medicine and Bachelor of Surgery (MBChB)</td>
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<tr>
<td>Course Code A100</td>
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<tr>
<th>120 places available to home/EU applicants and up to 10 places available to non-EU applicants.</th>
<th>A-level grades required are AAB including biology or chemistry plus another science subject (maths or further maths accepted) and a third rigorous subject. Chemistry as a minimum must be offered at AS-level grade B.</th>
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<tbody>
<tr>
<td>Typically for school leavers we require a minimum of 4 GCSEs at grade A/A* with English language and maths at grade B or better. Core science plus additional science, or any single science not taken at AS/A2, must also be passed at a minimum of grade B. Candidates who took GCSEs before 2008 should check science requirements on the web pages.</td>
<td>Graduates with a 2i honours degree or better in a degree subject that includes a substantial biology/chemistry content are considered. In addition graduates should have GCSE English language and maths at grade B or better.</td>
</tr>
<tr>
<td>All applicants must take the UK Clinical Aptitude Test (UKCAT) in the year of application and have gained experience in a caring role.</td>
<td>Applicants must submit their UCAS application for course code A100 (MBChB degree) at K12 (Keele University) by the 15 October deadline.</td>
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www.keele.ac.uk/depts/ms/undergrad/admissions_faqs.htm
Graduate Entry Programme
4-year Bachelor of Medicine and Bachelor of Surgery (MBChB)
Course Code A101

<table>
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<tr>
<th>Up to 10 places available to home/EU applicants, entering directly into module 2 of the 5 year course. This course is not currently open to non-EU students.</th>
<th>Graduates must offer a 2i honours degree or better if they would like to be considered for direct entry into module 2 of the course, therefore having the opportunity to complete the MBChB in four years. Places will be offered to the highest ranked applicants who meet the eligibility requirements.</th>
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</thead>
<tbody>
<tr>
<td>The selection process is identical to that for A100 entry, except for the source of the academic performance information. Successful applicants will commence module 2 two weeks early and undertake course work that bridges any gaps in experience (e.g. communication, clinical skills, professionalism, etc.).</td>
<td>This entry route is designed to recognise relevant prior learning achievement of graduates and blend them with standard entry students into the new integrated curriculum at a point that will be more challenging. It is likely that successful applicants will have a prior degree in either a biomedically related science or another health profession, although applicants with other backgrounds can be successful with appropriate prior study and preparation for GAMSAT.</td>
</tr>
<tr>
<td>The workload will initially be heavier than for students progressing from module 1, with additional course content included based on a learning needs analysis of each entrant.</td>
<td>Applicants with prior degrees may choose to apply for any of the three entry pathways, depending on their academic backgrounds and strengths.</td>
</tr>
<tr>
<td>All applicants must have taken and achieved a threshold score in the Graduate Australian Medical School Admissions Test (GAMSAT) within the last two years and have gained experience in a caring role.</td>
<td>Applicants must submit their UCAS application for course code A101 (direct entry to module 2 MBChB) at K12 (Keele University) by the 15th October deadline.</td>
</tr>
</tbody>
</table>

Health Foundation Year for Medicine
6-year Bachelor of Medicine and Bachelor of Surgery (MBChB)
Course Code A104

<table>
<thead>
<tr>
<th>Up to 10 places available to applicants (home/EU or non-EU) without the science subjects needed for the 5 year degree.</th>
<th>A-level grades AAB are required and A-level combinations should not include chemistry beyond GCSE level. A-level biology is only acceptable when combined with non-science A-levels. We expect that the majority of applicants for this programme will not have studied the sciences at a higher level. Applied science is acceptable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typically for school leavers we require a minimum of 4 GCSEs at grade A/A* with English language and maths at grade C.</td>
<td>Graduates with a 2i honours degree in a humanities/social sciences/nursing degree will be considered if they do not hold the standard science A-levels required for the 5 year programme or do not wish to undertake the GAMSAT qualification required for the 4 year programme.</td>
</tr>
<tr>
<td>Students undertaking an access to HE course will be considered at distinction level.</td>
<td>Other level 3 or 4 qualifications may be considered.</td>
</tr>
<tr>
<td>All applicants must take the UK Clinical Aptitude Test (UKCAT) in the year of application and have gained experience in a caring role.</td>
<td>Applicants must submit their UCAS application for course code A104 (Medicine with Health Foundation Year) at K12 (Keele University) by the 15 October deadline.</td>
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</table>
Additional Entry Tests

All applicants for courses A100 and A104 should note that as part of the entry requirements they must undertake the United Kingdom Clinical Aptitude Test (UKCAT). The results from this will contribute to our decision-making process. A bursary system is in operation for candidates requiring assistance, please see: www.ukcat.ac.uk

Applicants for the graduate entry programme (A101) are required to undertake the Graduate Australian Medical School Admissions Tests, please see: www.gamsatuk.org for more details. The result of this test will be used to rank applications and to determine which candidates will be interviewed. GAMSAT must be taken on a single date in September, so please ensure that you have made suitable arrangements to take the test on this date.

In addition, international applicants might also be asked to undertake an English language qualification such as the International English Language Testing Service (IELTS) with a minimum average score of seven, with not less than seven in any one component taken at the same sitting.

Admissions Statistics

For 2010 entry we received over 1,600 applications for the places available.

Work Experience

It is essential that all applicants gain experience in a caring role before submitting their UCAS application. More advice and guidance is available on the School of Medicine website: www.keele.ac.uk/depts/ms/undergrad/studentinfo.htm

MBChB 2011 Entry Requirements

It is your responsibility to check that you meet our entry criteria for your chosen course, as published on our web pages, prior to submitting your UCAS application. Please see our web pages for the most up-to-date details: www.keele.ac.uk/depts/ms/undergrad/courseinfo/entryrequirements.htm

If you apply and are offered a place at the School of Medicine, you will also be required to apply, through the University, for an Enhanced Disclosure from the Criminal Records Bureau. You will also be required to comply with the Independent Safeguarding Authority’s Vetting and Barring Scheme. See: www.isa-gov.org for more details.