

# Medical Education News

## Welcome to the first edition of Medical Education News



Professor Jenny Higham  
Head of Undergraduate  
Medicine

Dear Colleagues,

Welcome to the first issue of Medical Education News our bi-annual newsletter, produced by the Undergraduate Medicine Office, for our colleagues across the Faculty and our associated Trusts. The newsletter will bring you up to date on our latest news and events.

We have had a busy, but exciting year, with the General Medical Council visit and our ongoing curriculum review and are now looking forwards to the start of the new academic year and Graduate Entry Programme. We will be updating you on the progress of these in the next issue.

If you have any articles for our next issue, please send them to Mr Paul Ratcliffe ([p.ratcliffe@imperial.ac.uk](mailto:p.ratcliffe@imperial.ac.uk)).

Best wishes,

## Congratulations to our graduands!

Professor Jenny Higham, Head of Undergraduate Medicine

The Student Union held an **Affirmation Ceremony** on 2 August to celebrate and acknowledge the students' achievements at becoming doctors and mark their entry into clinical practice. The ceremony was attended by 223 new doctors and 521 parents and guests and was held in the Great Hall at the South Kensington campus, followed by an afternoon tea at Dalby Court. Matthew Mak, graduand of 2008 remarked 'finally, six hard years of toil had come to fruition and no-one could have taken that moment away from us', he added 'we lived up to the 'work hard, play harder' ethic and will never forget the time spent at Imperial'. The undergraduate **Commemoration Day Ceremonies** will be held on **Wednesday 22 October**, at the **Royal Albert Hall**, where graduands will be formally conferred with their award.

## Awards for Teaching Excellence for NHS Teachers 2007-08

The contribution of over 800 NHS staff in West London to delivering the undergraduate course is valued immensely by the College, and there is recognition that the teaching is a shared activity, delivered by the medical and nursing staff, pharmacists, therapists and many others employed in both hospitals and general practice. Ten prizes are awarded each year and they may be made to staff at any grade and in any profession.

**Congratulations** to the recipients of the 2007/08 awards:

- Dr Ed Abrahamson, Chelsea & Westminster Healthcare NHS Trust
- Professor Edwina Brown, Imperial College Healthcare NHS Trust
- Mr Peter Dawson, Imperial College Healthcare NHS Trust
- Mr Mark Edwards, The Hillingdon Hospital NHS Trust
- Dr Ben Ellis, Ashford & St Peter's Hospitals NHS Trust
- Mr Ramy Fahmy, North West London Hospitals NHS Trust
- Dr Mary Hickson, Imperial College Healthcare NHS Trust
- Mr Don McCrea, West Middlesex University Hospital NHS Trust
- Dr Kevin Murphy, Imperial College Healthcare NHS Trust
- Dr Lola Odebiyi, CNWL Mental Health NHS Trust

The awards will be presented on **Wednesday 29 October 2008, 5.00pm to 8.00pm**, at Lecture Theatre G16, Sir Alexander Fleming Building, South Kensington Campus, London, SW7 2AZ and will be followed by Professor Edwina Brown's inaugural lecture **'To Teach is To Learn'** and a drinks reception. Registration in advance is required and if you are interested in attending, please contact Ms Leanne Bajada by Wednesday 24 September 2008 via email: [l.bajada@imperial.ac.uk](mailto:l.bajada@imperial.ac.uk) or 020 7594 9807.

## Battle of the bulge (Year)

Dr Sue Smith, Head of Examinations and Assessment and Ms Erika McGovern, Examinations Manager

June 2008 saw a very fond farewell to the so called "bulge year", when 371 Imperial College students were put through their PACES in the clinical examinations and written papers of Year 6. The successful graduation of the majority of these students is the result of 6 years of their hard work, combined with a great deal of effort by the academics and administrators alike.

Finding sufficient clinical placements and organising clinical examinations for such a large cohort has been a substantial challenge and everyone involved should be thanked for their sterling efforts in ensuring that the students in this mammoth year were able to enjoy the same high quality educational experience offered to smaller cohorts.



Students on clinical attachment



2007 Graduates

## Inside this issue

- E-Learning Developments ..... 2
- Awards for excellence in teaching and teaching fellowships..... 2
- Year 5 Pathology ..... 3
- Outreach ..... 3
- Learning Outcomes Project ..... 3
- Medical Ethics and Law ..... 4
- Quality Assurance of Basic Medical Education ..... 4

# E-Learning Developments

Ms Maria Toro-Troconis, Senior Learning Technologist



The technology of e-learning has progressed to the point where real opportunities now exist to improve radically some aspects of teaching and learning, moving away from the traditional 'lecture' scenario.

## Clinical e-lecture programmes

The model we developed uses interactive technologies, including Web 2.0 technology and e-learning tools, to assist learning and teaching in the clinical programmes. These technologies are not new; however, the way this technology has been put together to deliver has proved to be innovative curriculum practice and a stimulating learning experience for the students.

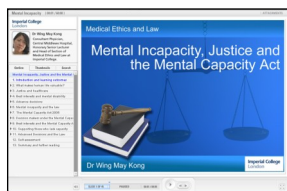
The development of this programme has also helped identify common threads running across different years, leading to the development of reusable e-learning materials, e.g. in the area of diabetes, which have endorsed the concept of vertical integration across the curriculum.

Very positive feedback has been received from Year 3 students:

*"The e-lectures are an invaluable learning tool; I have been able to reinforce new knowledge gained on the wards by reading up on the topic when I got home, using the material available on the e-lectures. The e-lectures themselves are clear and concise, with useful summary questionnaires in each one."*



A wide range of online learning materials in different formats are provided: interactive e-lectures, quizzes, Podcasts and Vodcasts, simulations, discussion groups and Virtual Patients.



## E-modules

A large number of interactive e-modules are and have been produced in different areas. These are now embedded across the curriculum.



## Medical Ethics and Law

These e-modules by Dr Wing May Kong have been developed and delivered to Year 5 undergraduate medical students as a revision tool.

## Renal Medicine

Two e-modules on Kidney Diseases have been produced by Dr Jeremy Levy. ARF & CRF; and Haematuria, Proteinuria & Shortness of Breath.

## Virtual Patients Application

The Virtual Patients Application (VPA) tool we have developed provides a user-friendly interface and the necessary tools to generate virtual patient cases and share them with partner organisations using common learning standards.

The virtual patient cases support the delivery of traditional learning introducing problem-based scenarios focused on clinical practice.

International partners are currently collaborating in the translations of the tool, creating new sharable cases as well as exploring new ways of embedding and delivering the virtual patient cases. A common online virtual patients repository is shared among the partners.



Dr David McIntosh, Honorary Senior Lecturer, is leading on the VPA project and is developing more than 100 interactive cases.

## Game-based learning for the delivery of Virtual Patients in Second Life

We have developed a Virtual Hospital in Second Life that aims to design game-based learning activities for the delivery of virtual patients that can drive experiential, diagnostics, and role-play learning activities supporting diagnosis, investigation and treatment.

Phase I of this project focused on the delivery of one virtual patient in the area of Respiratory Medicine, following the game-based learning model developed and implemented in Second Life.

This case involved the management of pneumothorax. The module was also available as part of a respiratory emergencies e-module embedded in the Year 3 undergraduate curriculum. Initial

data about gaming competence was obtained from the group and further developments took place after the pilot leading to a series of recommendations that were taken into account during the second phase.

Phase II introduces a multi-patient approach. Five virtual patients suffering from different respiratory problems: Asthma, Lung Cancer, COPD, Pneumonia and Pneumothorax have been implemented. The learner is asked to make decisions based on current information and acquires new information as a result of different decisions. More general feedback and guidance for cyclical content, driving the learner to repeat the activity have been introduced in this phase. The Imperial College London badge has been introduced as an option for learners to wear. The badge provides feedback from the system. Feedback will be delivered to the learners if they have not carried out any activity for the last 5 minutes informing the students about the patient they last treated and the last activity carried out on that patient.

A second pilot is being organised for early next year to evaluate these developments.

Project leads: Professor Martyn Partridge and Ms Maria Toro-Troconis.

## For more information:

Please email us at: [webmaster.umo@imperial.ac.uk](mailto:webmaster.umo@imperial.ac.uk) or visit our website at: <http://www.elearningimperial.com/> SLurl: <http://slurl.com/secondlife/Imperial%20College%20London/150/86/27/>

## Awards for Excellence in Teaching and Teaching Fellowships

Congratulations to those members of staff from the Faculty of Medicine who have been chosen for an award for excellence in teaching:

- Dr Mitch Blair, Medicine
- Dr Kate Hardy, SORA
- Dr Roger Kneebone, SORA
- Professor Karim Meeran, IS
- Professor Geoffrey Smith, IS
- Professor Dominic Wells, NMH

Further congratulations to Professor Karim Meeran who was also selected as a 2008 Imperial College Teaching Fellow.

The award winners and Teaching Fellows have received letters of congratulations from the Rector. Those who have been elected Teaching Fellows will be invited to be presented at one of the Commemoration Day ceremonies, which will take place at the Royal Albert Hall on Wednesday 22 October. There will also be a centrally organised occasion for the presentation of the certificates for the Awards for Excellence in teaching on a separate occasion.



## Year 5 Pathology Course

*Dr Mike Barrett and Professor Karim Meeran  
Theme Leaders, Year 5 Pathology*

Tropical Day is a traditional element of this course, marking the finish of the course. As usual, Professor Geoff Pasvol put together a very educational and entertaining programme, including excellent guest speakers.

Students put an enormous effort into the spirit of the day, where the Dress Code was "Tropical". Prizes were awarded to the best interpretations of tropical dress and some additional photographs and a video clip may be viewed via: <https://education.med.imperial.ac.uk/Years/5-0809/Path/tropical.htm>

### Interested in becoming a QABME visitor with the GMC?

The GMC regularly recruit for members of their visiting teams. More information can be found on their website: <http://www.gmc-uk.org/>. Please contact Mr Paul Ratcliffe ([p.ratcliffe@imperial.ac.uk](mailto:p.ratcliffe@imperial.ac.uk)) if you are interested.

## Outreach

*Dr Sue Smith  
Assistant  
Admissions  
Tutor*



You think you want to be a doctor, but have no medical connections, no family members who have been to university and little careers advice at school. How do you find out about medicine as a career?

Twenty young people came to Imperial College in July to spend a week working with current medical students on a programme of study developed in collaboration with the Outreach Office and sponsored by the Brightside Trust. The week was followed by work experience sessions for all participants at the Chelsea and Westminster Hospital.

Feedback from the participants indicates how much they were inspired and motivated by the programme. Thanks are due to the student mentors and the academic staff who contributed their time and energy to the programme and ensured its success.



## The Learning Outcomes Project

*Dr James Warner, Senior Education Project Leader for Undergraduate Medicine*

**Learning outcomes** mapped to the curriculum are pivotal in ensuring the undergraduate course is effective and comprehensive. Learning outcomes help educators ensure all aspects of a curriculum are covered in a course and redundancy in the timetable is identified and removed. They also help students prioritise and plan learning. Early on in the recent GMC visit, our learning outcomes were identified as in need of revision. The old document was a 26-page list of outcomes arranged by year/course. The content was inconsistent (there were as many outcomes in child psychiatry as in cardiology) and there was no opportunity to get a longitudinal view of the course across years. So, a Year-5 course organiser planning teaching of management of pregnancy would have difficulty identifying that elements of this were also taught in years 1,2 and 6.

Over the last year I have undertaken a complete review of the learning outcomes. This revision has a uniform style, is triangulated with tomorrow's doctors, classifies each outcome as "Knowledge" or "skills" (clinical examination/procedure) or "attitudes" and identifies and cross-references areas of overlap within and between years. It contains overarching, rather than detailed, learning outcomes, intended to help course organisers when planning detailed, course-specific learning outcomes.

Starting with meetings with strong student and faculty representation a draft document (in Excel) was prepared which was then sent to Heads of Year and course organisers for ratification. The final product was presented to the Education Sub Committees. Widespread consultation took place throughout the project. The new document divides outcomes into three groups:

- **Generic** outcomes. For example "apply an understanding of the NHS and principles of innovation within the health service and reflect on resource management in the NHS" (which incidentally is taught in years 1,2,5 and 6)
- **Specific** outcomes. For example "assess and manage common sexually transmitted infections and HIV/AIDS" (years 1,5,6)
- **Procedural** outcomes. For example "insert an intravenous cannula"

This master document will inform in the next stage of this project. Two parallel developments are planned over the next year. First, the document will help exam blueprinting (linking exam questions to the course, ensuing questions are salient and appropriate). Second, the revision of course specific outcomes, which could be much more detailed than previously, helping students and educators plan learning. A further offshoot will be to identify redundant learning and remove it; basically if something is being taught which cannot be mapped to the Learning outcomes it should be removed from the course.

# Quality Assurance of Basic Medical Education

Professor Jenny Higham, Head of Undergraduate Medicine

Imperial was visited by the General Medical Council (GMC) during 2007-08 for a Quality Assurance of Basic Medical Education (QABME) review. The GMC visits medical schools, twice in a period of 10 years, to ensure that their undergraduate teaching is consistent with Tomorrow's Doctors.

The initial stage of the process was for us to complete and submit a detailed questionnaire and supporting documentation covering the whole MBBS/BSc curriculum content and structure, teaching and learning, quality assurance processes, facilities, student selection, student welfare and support, and assessment. It also contained information on demographics. The construction of this document required wide consul-

tation with staff across the Faculty.

The submission of the questionnaire was followed up by visits to the School for presentations on aspects of the documentation, meetings with students and staff, meetings with Directors of Clinical Studies, meetings with F1 Doctors and their educational supervisors, and various visits to many of our associated Trusts and GPs to observe teaching on clinical attachments. The team also observed three PACES examinations and the Year 6 Examination Board.

In July the visitors presented their draft report to us, highlighting some requirements and recommendations for improvement. These related to the implementation of the Graduate Entry Programme, provision of life support skills beyond basic, the implementation of the curriculum review, the assessment strategy and the reliability and validity of clinical assessment. We found that we had already identified many of the requirements and recommendations and many of which

were already being considered as part of the curriculum review process.

As part of the curriculum review, several work streams were formed to consider possible changes to various aspects of the course and these will now be submitting their final recommendations to a newly formed Curriculum Review Implementation Group (CRIG). The CRIG will be responsible for implementing these recommendations alongside the requirements and recommendations from the QABME.

The final report is published in late October and we will then have the opportunity to respond to the GMC formally.

We would like to thank all colleagues that have been involved with the QABME for their invaluable contributions and support.

If you would like more information about the QABME please visit the GMC website: <http://www.gmc-uk.org>.

## Heads of Year 2008-09

Head of Years 1 & 2  
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Professor Martyn Partridge  
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## Medical Ethics and Law

Dr Wing May Kong, Head of Section of Medical Ethics and Law

This August we have launched a vertical integration program for medical ethics and law at Imperial. Historically, students in Years 5 and 6 have not had ethics and law teaching that linked back to their core teaching in Year 2. A vertical integration program is something that we have long aspired to but, for a teaching unit staffed only by full time NHS clinicians, seemed a Herculean task. However, the GMC QABME review focussed our minds and thanks to Drs Mitch Blair and Mike Barrett, we created a model that was clinically relevant, innovative and achievable.

In this first phase of the vertical integration program we have integrated ethics and law teaching into Year 5 obstetrics and gynaecology, paediatrics, primary care and psychiatry. The clinical leads in the 4 specialties have been pivotal to the successful launch of the vertical integration program and we have worked closely with them in the development and delivery of the program. Ethics and law assignments in each of these specialties require students to apply and refine the analytical and reflective skills developed during their Year 2 teaching to clinical cases or significant events encountered during their Year 5 rotations. Our focus is helping students to make better clinical decisions in everyday practice by integrating ethical and legal reflection with bio-medical knowledge, bedside skills, empirical data analysis and inter-disciplinary working. The assignments take the form of case based discussions or significant event analyses presented at the end of each rotation.

To support students, we have worked with Imperial's e-learning group led by Maria Toro-Troconis and e-learning developer Liz Horsley, to repackage the Year 2 teaching into 6 e-modules. These have been designed for flexible, self directed learning and cover core topics including autonomy, confidentiality and the mental capacity act. The e-modules include audio-accompaniment, self assessment quizzes and web-links and can be accessed from any computer via the Imperial College web based virtual learning platform, Blackboard learning.

The tutors for the presentation sessions are speciality clinicians not ethicists or lawyers. We feel this is crucial to ensuring that students appreciate how ethical and legal reflection is central to good clinical practice. Through our experience with our Year 2 ethics tutors, who are mainly senior clinicians without formal qualifications in ethics and law, we have found that good facilitation skills combined with clinical experience and reflective practice are the key qualities of a good ethics tutor. These qualities are likely to be even more important in Year 5, as students prepare to make the leap into professional practice. We have a program of training sessions and study days for Year 5 and Year 2 tutors. In addition, Year 5 tutors will have access to the e-modules so that they can feel confident about the depth and level of knowledge that we expect from our students. Over the course of this academic year we hope to make the e-modules available to all clinicians involved in Year 5 teaching.

## STOP PRESS!

**Congratulations!** to the E-Learning Team who were awarded the 3rd prize on the ALT Learning Object Competition 2008 for the Learning Object: Patient with Type 1 Diabetes:  
[http://www.elearningimperial.com/images/emu\\_2\\_v.2.swf](http://www.elearningimperial.com/images/emu_2_v.2.swf)



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