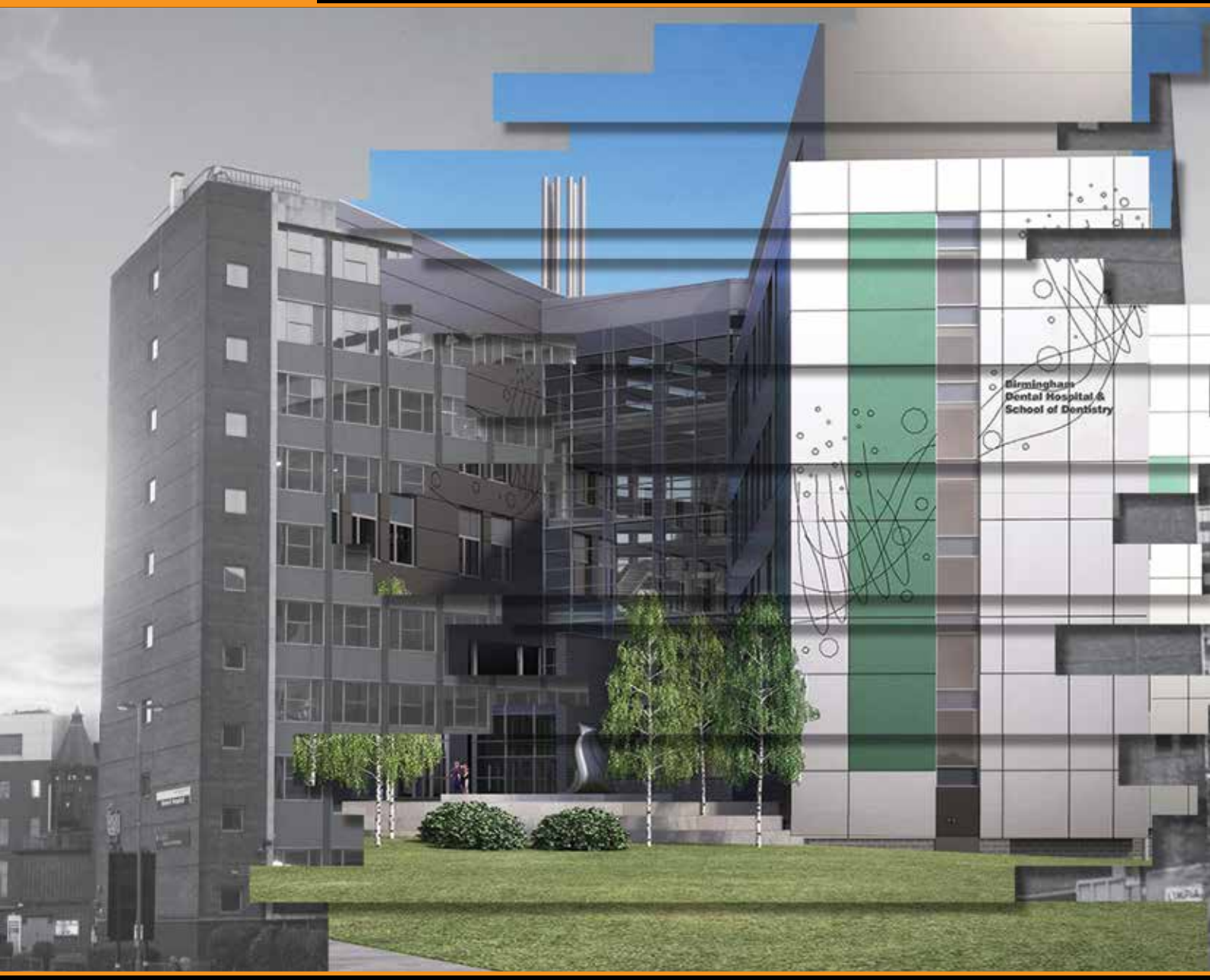
UNIVERSITY OF BIRMINGHAM

Dental ROOTS

The Dentistry alumni magazine

Issue 5 2014



Our new Dental Hospital and School of Dentistry

Inside: picking the best dental students; the dangers of buying equipment online; happy birthday Biomedical Materials Science

Welcome

Anyone who now passes along the Bristol or Pershore Roads will see the new Birmingham Dental Hospital and School progressing day by day. It is an impressive sight; a complex building which secures the future of dental education, research and clinical service for the city, region and beyond. It is the biggest project I have been involved in and I am going to see it go ahead after many years work thanks to a partnership between Birmingham Community Healthcare Trust, BasLift and the University of Birmingham.

Although it seems not a day goes by without something happening in regard to the new building, we also delivered our Research Excellence Framework 2014 submission and had two General Dental Council Inspections; one for our course and the second for the final examination – we await the reports.

Education innovation continues with the launch of our bespoke Clinical Assessment and Feedback System (CAFS), which is iPad based and replaces the outdated Optical Mark Reader system we used for decades. Admissions saw us introduce Multiple Mini Interviews; eight varied stations in order to get a broader evaluation of applicants to study Dentistry, and Therapy and Hygiene at Birmingham.

We were rewarded with an Athena SWAN Charter Silver Award gained as part of the University of Birmingham College of Medical and Dental Sciences submission which recognises commitment to advancing women's careers in science, technology, engineering, maths and medicine (STEMM) employment in higher education and research.

Biomedical Materials Science celebrated its 21st birthday with a reunion and dinner. This course provides students with a diverse range of skills and research from an area that makes a major contribution to School of Dentistry research.

I hope you enjoy this edition of *DentalROOTS*, this time next year we will be in the new building, but there is much work to be done before we can move in.

My very best wishes.

Professor Philip Lumley, Head of School of Dentistry

Stay in touch

Update your details or share your news with us via mds-alumni@contacts.bham.ac.uk or +44 (0)121 414 3488.

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search for 'University of Birmingham Alumni and Friends'

Dentistry blog: **brumdentists.com**

Medical and Dental Sciences alumni website: **www.birmingham.ac.uk/mds-alumni**

Alumni congratulations

Congratulations to Julian Webber (BDS 1974) who was recognised for 'outstanding contribution to private dentistry' in the Private Dentistry Awards 2013.

What stories would you like to see included in *DentalROOTS* in the future?
Let us know at mds-alumni@contacts.bham.ac.uk

Front cover: The old and new Dental School buildings.

Thank you

Many thanks to Peter Hopper (Dentistry 1947), who sent in this wonderful picture of the 1942–43 dentistry intake. He also sent in a menu card from the 1946 student society's dental dinner – what a wonderful keepsake.

Athena SWAN Silver Award

We are delighted to announce that the College of Medical and Dental Sciences has been awarded an Athena SWAN (Scientific Women's Academic Network) Silver Award. The Athena SWAN charter was established in June 2005 and supports good practice in gender equality.

The awards are rated as Bronze, Silver or Gold. Birmingham Dental School is one of only two dental schools in the UK that has been rated as Silver. None have been rated as Gold.

Professor Deborah White, Director for Education, said: 'It's important that women are represented at the highest levels in schools, colleges and the University. I certainly think we are making progress in this area and we are seeing more equality, which is good news for the profession. This Silver award demonstrates our commitment and, of course, helps us to attract and retain the brightest women in dentistry and science.'

A tailored mentoring scheme, where younger women are mentored by alumni and staff, helped the College win the award.

Professor Deborah White oversees the Athena SWAN initiative in the School of Dentistry. Professor Iain Chapple and Dr Mel Grant also represent the initiative from the School.

To find out more about the scheme visit the Athena SWAN webpages at **www.ecu.ac.uk.**

50 years of fluoride

Fifty years ago, Birmingham City Council introduced one of the most influential public health measures in our region; it took the decision to be the first to introduce water fluoridation in the UK.

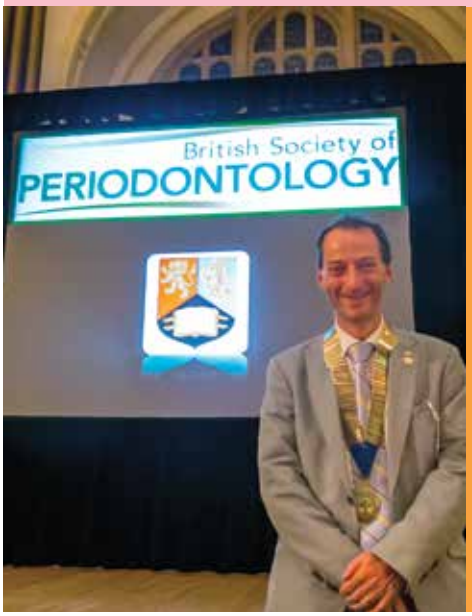
Dental Public Health Professor Deborah White said: 'Birmingham City Council had shown great foresight and as a result dental health in Birmingham is amongst the best in the country. Research shows us how important fluoride is in helping to improve decay and that fluoridated water has additional benefits beyond fluoridated toothpaste. It's a really important public health measure and the best part is that people don't have to take any specific action to get the benefit.'

In 2014, Public Health England found that there were 45% fewer hospital admissions of 0 to 4 year olds for dental caries (primarily to have decayed teeth extracted under a GA) in fluoridated local authorities of England compared with non-fluoridated areas. This is important information reinforcing the evidence that fluoridation is effective and has far-reaching benefits for the population of Birmingham and the West Midlands.

Communication accolade for PhD student

Binish Khatoon has won the 2014 British Dental Editors Forum Young Dental Communicator Award. The award is given to a young person who has created a significant dental communication such as a refereed article, journalism, social media, video, podcast, or any other form of communication. Binish is a PhD student at the School of Dentistry undertaking educational research into mobile learning. Binish attended the award ceremony at the British Dental Association. On receiving her award from Dr Ken Eaton (BDEF) and Dr Mick Armstrong (Chair BDA PEC), she thanked the assembled audience. The article that won the competition was *Can We Build Teach and Practice Dentistry Anywhere, Anytime?* by Binesh Khatoon (corresponding author). The co-authors were K.B. Hill and A.D. Walmsley.

Congratulations, Binish!



The British Society of Periodontology

Congratulations to Professor Iain Chapple who has become the latest President of the British Society of Periodontology (BSP).

Professor Chapple started his presidency in style by hosting the BSP international congress here in September. The congress addressed periodontal medicine and surgery under the overarching theme of *Harnessing the Power of Youth: a Collaboration Between Medical Science and Art*'. Internationally acclaimed speakers, including a medical advisor to the former Clinton administration, provided seminal lectures to over 400 delegates, and the University of Birmingham entertained around 300 delegates and guests in the stunning Bramall Theatre and the Great Hall. A wonderful time was had by all.

Professor Chapple said: 'This is a really exciting time to be President of the BSP and there are lots of challenges ahead. However, we have developed an ambitious strategic plan and embraced partners from industry to help us deliver this plan, in line with our vision of periodontal health for a better life.

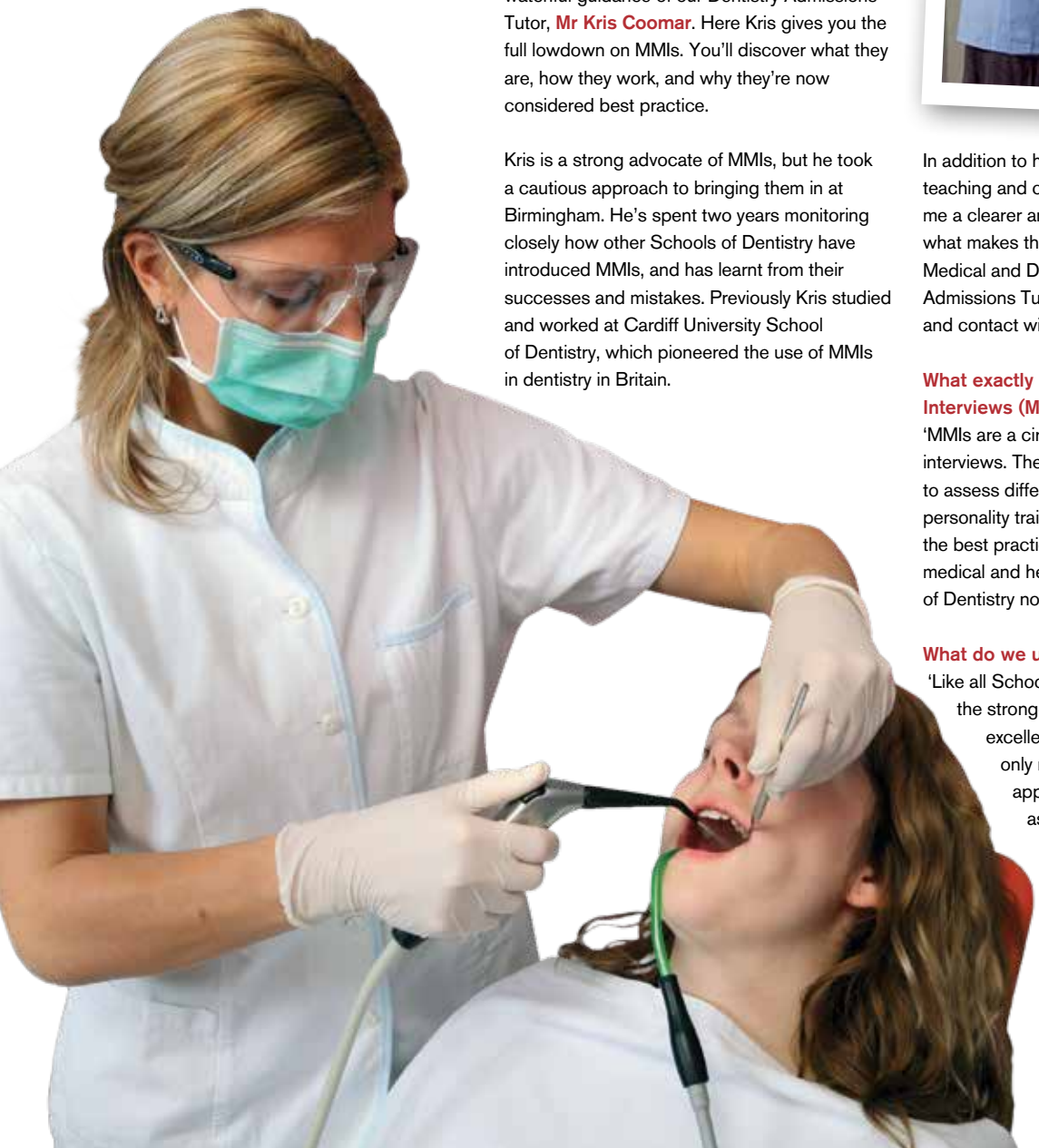
Feedback from the delegates included 'Best BSP conference I have ever attended', and 'truly inspiring'.

Picking the best dental students: your guide to our new interview structure

How well do you remember your interview at Birmingham? For most alumni, it's something you never forget. Perhaps you felt nervous, confident – or a bit of both.

Chances are you met with the Admissions Tutor and a colleague at the School of Dentistry. You were then probably interviewed around a table. In just fifteen minutes, you had to convince them you were the ideal candidate.

Now, that's a tricky task to pull off – however good you are. And it's just as hard for your interviewers to make the best choices in these circumstances.



At Birmingham, we've looked carefully at the skills and characteristics that make good potential dentists. Then we've thought deeply about how better to identify and measure these factors at interview. Following much in-depth research and planning, this year we introduced a new way of interviewing applicants. It's called the Multiple Mini Interviews (MMIs).

MMIs have been brought in here under the watchful guidance of our Dentistry Admissions Tutor, **Mr Kris Coomar**. Here Kris gives you the full lowdown on MMIs. You'll discover what they are, how they work, and why they're now considered best practice.

Kris is a strong advocate of MMIs, but he took a cautious approach to bringing them in at Birmingham. He's spent two years monitoring closely how other Schools of Dentistry have introduced MMIs, and has learnt from their successes and mistakes. Previously Kris studied and worked at Cardiff University School of Dentistry, which pioneered the use of MMIs in dentistry in Britain.

In addition to his admissions role, Kris has both teaching and clinical responsibilities. 'This gives me a clearer and more balanced insight into what makes the best students. Most other Medical and Dental schools now appoint Admissions Tutors with some clinical experience and contact with student learning', he said.

What exactly are Multiple Mini Interviews (MMIs)?

'MMIs are a circuit of short and varied interviews. They use various tasks and methods to assess different technical skills and personality traits. Increasingly, MMIs are seen as the best practice way to screen potential dental, medical and healthcare students. Most Schools of Dentistry now use them.'

What do we use MMIs to test for?

'Like all Schools of Dentistry, we want to pick the strongest candidates. Academic excellence is important, but it's not the only measure we use. We now invite applicants in for a one-hour MMI assessment. Birmingham uses eight *activity stations* for MMIs. These are: Manual Dexterity and Judgement; Data Interpretation; Empathy; Professionalism and Ethics; Logic and Reasoning; Communication; Management and Leadership; and Issues in Dentistry.'

How are the MMIs measured?
'Each station has its own assessment method. Take Manual Dexterity and Judgement, for example. Gone are the times where candidates brought in model toys, decorated cupcakes and pictures of henna tattoos to show off their skills (real or otherwise). Now candidates are observed doing a practical task intended to mimic part of a real life dental procedure.

At Birmingham, we grade a candidate's performance on each station. The grades are set up to show a clear differential between candidates. Likewise, we've been careful to include enough stations to assess candidates fully. After each MMI circuit, candidate performance scores are collated and all individuals are given an overall MMI ranking. The best are made an offer.'

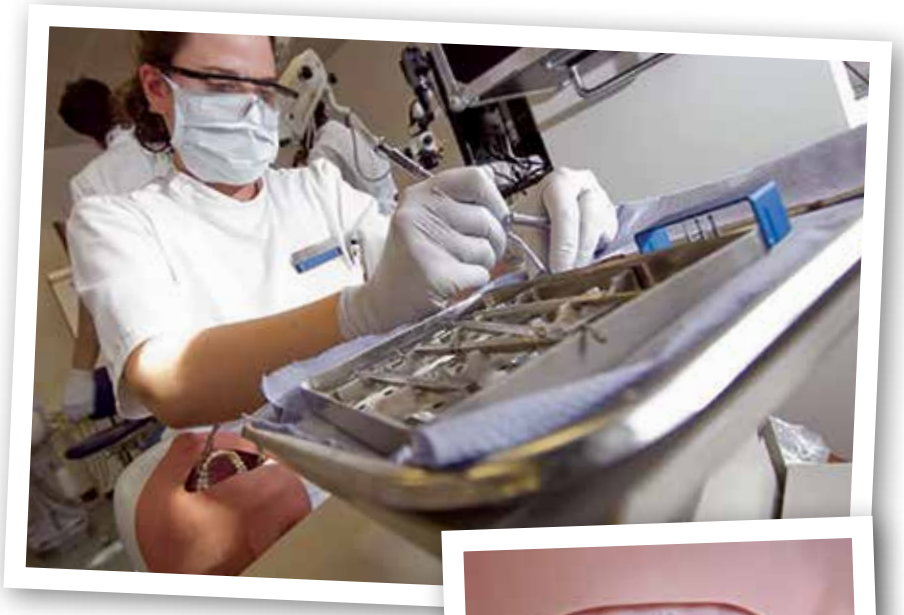
Can you tell us more about each station?
'MMIs are designed to keep applicants guessing. So I can't reveal any more than that.'

Why are we bringing in MMIs?
'In short, it's because the standard of our applicants is going up all the time. Demand for Dentistry places at Birmingham remains consistently high. Each year, our undergraduate course gets between 600 and 800 applicants for around 71 available places.

Our reputation and location always make us a popular choice. Then there are other reasons too. EU applications and those interested in studying in our new School and Hospital are pushing up the applicant demand. Students seem to value our enquiry-based learning approach, and the fact we still offer the option to undertake an elective project in the penultimate year of study.

Recently, the government has cut undergraduate Dental places by 10% nationwide. This puts even more pressure on everyone. So we need a modern system that helps us select candidates with the greatest potential, in the fairest, most effective and transparent manner.'

What are the benefits of MMIs?
'There are three main benefits to MMIs. Firstly, we can test for a wider range of skills and traits than we could before. It's very difficult to make effective decisions based on short verbal interviews alone.



Secondly, MMIs help level the playing field for applicants. As you may be aware, the old interview system was quite predictable. This let some schools coach their students for interviews; not every school provides this service. Because MMIs are unpredictable, they make it harder for schools to prepare their students, making it fairer for all interview candidates.

In that respect, MMIs form part of a wider *fairer access drive* at the University of Birmingham. This includes the University's Access to Birmingham (A2B) scheme.

Thirdly, MMIs cuts the chances of interviewer bias in choosing candidates. Before, usually only two staff members would interview applicants. Now up to eight staff members take part in assessing individuals. The increased assessor numbers reduce the chance of interviewer bias and helps candidates get the fairest interview.'

Are there any downsides of the new approach?
'It's certainly an intensive week of interviews, which is both demanding on staff and resources. But the downsides are marginal compared to the potential benefits MMIs offer us and our students.'

How will we know if MMIs are a success?
The team will monitor the technical and academic performance of undergraduates throughout their degrees. They will refer back periodically to the marks gained at the interview stations, and analyse the results. Already we are recording the demographics of students admitted under the new system, and are comparing it with the old. Feedback at the MMIs will be collected every year, and will be used to improve future stations.

'Of course, the final overall results will not been known until all the current first year students graduate in 2019. However, staff and candidate feedback from the first round of MMIs was encouraging.

Figures also show that A2B candidates did very well in this first year of MMIs. 12 of 21 candidates (57%) interviewed were made an offer. This compares well with last year, when six of 20 candidates (30%) interviewed under the old system were offered a place.'

Happy Birthday, Biomedical Materials Science!

How did you celebrate your 21st birthday? Was it a quiet affair, or did it fly past in – ahem – a bit of a blur? However you marked it, your 21st is a big milestone. It's a great chance to reflect on your progress so far, and the challenges and opportunities that lie ahead.

And that's exactly what current and former Biomedical Materials Science staff and students did recently. They hosted a party to celebrate 21 years of the subject being taught here at Birmingham.

Retired Professor Peter Marquis gave a positive and thought-provoking speech, in which he shared his insights and experiences. Professor Marquis launched the course back in 1993, helped by Dr Dick Shelton and Dr Rachel Sammons.

Ground-breaking approach

Originally, Professor Marquis said, Biomedical Materials courses were based in Schools of Engineering or Science. But Birmingham decided to take a more ground-breaking approach, and base a course in a clinical school. This allowed students to base a course in a clinical school. This was to let students focus on the biological and clinical aspects of medical materials, as much as on the materials science and engineering.

Making students attractive to employers

'We wanted to create a modular degree,' he said, 'one that shared courses with Biomedical Science, Materials Science and Dentistry students.' The plan was to give graduates a mix of scientific, clinical and engineering skills that would be useful and attractive to employers.

Helping alumni succeed

Dr Rachel Sammons is now the Programme Lead. She works closely with colleagues Dick Shelton, Head of Biomaterials, Dr Will Palin (BMedSc, 1998; MPhil, 2001; PhD, 2004; PG Cert, 2008), and Dr Mike Hofmann in the Biomaterials Unit. They believe that irmingham's innovative teaching approach has paid off, and are proud of the many different professions alumni have successfully gone into.

'Many are now leaders in their own fields of biomaterials research and development,' she said. 'Others are well-established lecturers, teachers, clinicians, lawyers, and professionals of many other fields allied to medicine and beyond.'

We are a small, custom-made course and truly interdisciplinary,' Dr Sammons said. 'We work closely with clinicians, and combine teaching from Metallurgy and Materials, the Medical School and Dentistry throughout the course. This helps students to communicate with materials scientists, biologists and medical personnel.'

Specialist teaching and learning

'At the same time, our students learn from specialist guest lecturers from other universities including Liverpool, Aston and Birmingham City', Dr Sammons said. 'They explore areas like reconstructive surgery, drug delivery, and biomaterials for use in the cardiovascular system, eye and ear – to name but a few. In total, students are taught by over 30 academics. They carry out their final year 20-week research project in the same environment, and using the same equipment, as PhD students and post-docs.'

The course structure itself has also helped students get their research published. 'We place great emphasis on the final year project,' Dr Sammons said. 'This has resulted in several publications in peer-reviewed journals and conference presentations.'

Won't rest on laurels

'I think these factors are a major reason why the course has survived,' Professor Marquis said. 'There were a number of courses we saw as competitors when we launched. All of these have now ceased, or become options in materials science and engineering courses.'

But this is no time for Birmingham to rest on its laurels, Professor Marquis said. 'Other degree courses have emerged,' he said, 'notably in tissue engineering. It's time for us to look to the future.'

Powerful mix

Dr Sammons agreed, and highlighted the powerful mix of skills and expertise in place here at Birmingham. 'We all have different backgrounds,' she said. 'I'm a biologist with a first degree in Microbiology. Then I carried out research in in osteoblast-hydroxyapatite interactions and worked with dental implants. My major research interest now is in preventing infections associated with biomaterials.

'Dick Shelton,' she said, 'is a practising dentist but researches tissue engineering. Will Palin is a specialist in dental biomaterials and related technologies. Mike Hofmann joined us in 2004 as a post-doctoral researcher with a background in physics, now working on dental and bone cements. He was made a lecturer in 2006 and is now our Admissions Tutor.'

'So although we're based in the Dental School,' Dr Sammons said, 'it's not all about teeth. In our research we focus on dental and orthopaedic biomaterials and tissue engineering. That's because orthopaedic biomaterials is the biggest area for biomaterials, and tissue engineering is the future. But we are interested in the human body's reactions to all other biomaterials as well – for example artificial arteries, stents, heart valves, hearing aids, contact lenses and so on.'

What the future holds

Since the course began, Professor Marquis said, the field has evolved a lot. 'It started from a rather engineering-based focus on exploiting existing materials, such as titanium in artificial hips,' he said. 'It's now moved to include mimicking of biological processes and tissue regeneration.'

But what exactly the future holds for current students, Professor Marquis admitted happily, is hard to predict. He thinks the rapid innovation in miniature sensors could be a guide. 'Maybe in 20 years time we'll all wear tiny health monitors,' he said, 'that will monitor our body's condition continually.'

Exciting opportunities for alumni

There are a number of exciting opportunities for people working in the subject, Professor Marquis said. He thinks that the future of biomaterials may be linked, for example, to the development of novel drug delivery systems and diagnostic tools. But whatever lies ahead, he is confident that Birmingham will continue producing alumni who can handle these challenges well.

'I believe that the course structure we set in place 21 years ago makes it possible to change in response to these innovations and developments,' he concluded.

On behalf of everyone here at *DentalROOTS*, we'd like to wish Biomedical Materials Science a very 'Happy Birthday'.

Biomedical Materials Science 21st birthday celebrations – 12 September 2014

On Friday 12 September, over 70 alumni and former staff as well as current staff and students gathered at the Dental Hospital for an enjoyable evening celebrating 21 years since the Biomedical Materials course started.

The evening was an opportunity for alumni to reminisce and catch-up with fellow classmates, lecturers and talk to current students about what the course is like now. Peter Marquis who started the course in 1993 gave a speech and of course it wouldn't have been a birthday party without a delicious cake, in the style of a hip replacement handmade by Biomaterials' very own Jo Batt.

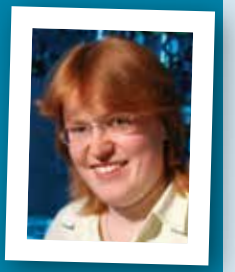
Alumni also had the opportunity to tour the Biomaterials unit and Dental School one last time before we move buildings to the former Pebble Mill site in autumn 2015. After the evening reception, several alumni and staff went on to have a curry in Birmingham city centre to carry on the celebrations.

Photos kindly taken by Imran Asif (Biomedical Materials Science, 2013)

Where are our graduates now?

Our Biomedical Materials Science alumni live in ten countries across the globe and have gone into wide ranging careers from scientists to teachers and medical sales. The first cohort graduated in 1996, he's what some of them are doing now:

Emma Mortimer – I am at home looking after the children at the moment. I keep myself busy with volunteering at school, power walking and am also membership secretary for our local outdoor swimming pool.



Dr Melissa Riley – Schottlander Prize Winner, 1996, PhD (Metallurgy and Materials), 2000, CEng and MIMMM. Now Principal Project Leader – Surface Engineering at TWI Ltd, Cambridge UK, a Research Technology Organisation specialising in Engineering Technology.

Hardip Sahota – After finishing my Biomedical Materials Science degree, I went on to study dentistry at Birmingham Dental Hospital. After my vocational training I have been working at the same practice in Dudley for 12 years as an associate dentist. I was born in Birmingham, studied here and I still live here…Birmingham has always been my home! Both the Biomedical Materials Science and dentistry degree, as well as life at the University of Birmingham holds many fond memories and was a great eight years of my life.

Please keep in touch with us and let us know what you are doing!

BIRMINGHAM DENTAL HOSPITAL *AND SCHOOL OF DENTISTRY*

When the new Birmingham Dental Hospital and School of Dentistry opens its doors to students, staff and patients in just under a year's time, it will be a historic moment, as the first such building to be opened in 40 years in the UK.

But the opening of the new, state-of-the-art building will just be the latest pioneering dental development to come out of Birmingham – after a long and illustrious history which has seen us become the home of the longest established dental hospital in the country.

The dental hospital in Birmingham – then known as the Birmingham Dental Dispensary – was established in 1858, with dental teaching begining 22 years later in 1880.

The students paid the sum of 75 guineas each for the education they would receive. In 1892, Queen's College, which organised that teaching, merged with Mason College, expanding the numbers of students dramatically.

Although there were two dental hospitals set up before Birmingham, they have both long since closed – while at Birmingham the hospital and school has thrived and grown, so much so that our new building opening next year will actually be the seventh home of the School.

From Oddfellows Hall in Temple Street where the hospital opened, it moved four times before settling in Great Charles Street in 1905, as a response to the increased numbers of students and patients using the building following Mason College receiving its charter and becoming the University of Birmingham in 1900. It was the first University in the UK to grant dental degrees.

The Great Charles Street location was a smaller hospital than had been planned, but a public appeal for funds was unsuccessful and so the plans had to be downgraded. As it was, the £10,000 cost of the building

Dental Hospital in Great Charles Street

was partially met by staff – who contributed a massive 11 per cent of the total by donating £1,100 to the project.

But, as times changed, that building too outlived its usefulness, and in 1955, staff began the process of commissioning a new building to meet the needs of staff and students.

At one point, there had been plans afoot to build a dental hospital near to the Medical School on campus, but the outbreak of the Second World War prevented the idea from ever being more than a dream. In addition, bombs dropped on Birmingham only narrowly missed the Great Charles Street hospital, destroying the building next door.

Ten years after Professor Alex MacGregor had started the commissioning of the new building on St Mary's Row, the current home of the School and Hospital opened – and it was every bit as state-of-the-art at that time as our new building will be when it opens its doors next year. The move was not without incident though. Dr Peter Rock, then a student at the School, recalled how he and a group of colleagues spent a day with smuggled-in sledgehammers and chisels knocking down walls separating the male and female common rooms at the end of the 1964 summer term, in preparation for the move.

Their efforts were premature though, and when Prof David Shovelton looked in late that day, he delivered the startling news that the move was delayed – and the autumn term was spent sitting on piles of bricks until the move began in November 1964, finishing the following January – although the students had at least fulfilled their wish for a unisex common room.

Our students who join us from September next year will go straight into the new facility for all of their clinical skills work. They will benefit from world class teaching facilities at the new building, where the larger wing will focus on clinical teaching and service, whilst education and research will take place in the second, smaller wing. But the physical new building is not the only change taking place, with the integration of community dental and hospital services also underway, which should also bring innumerable benefits to students and researchers. This integration will allow for the already world-class research, which is carried out at Birmingham to be strengthened, with an increase in clinical trial activity to aid understanding of risk factors that underpin oral and dental disease.

Much like when the late Professor McGregor, then Director of Dental Studies, visited the top facilities across Europe to draw inspiration

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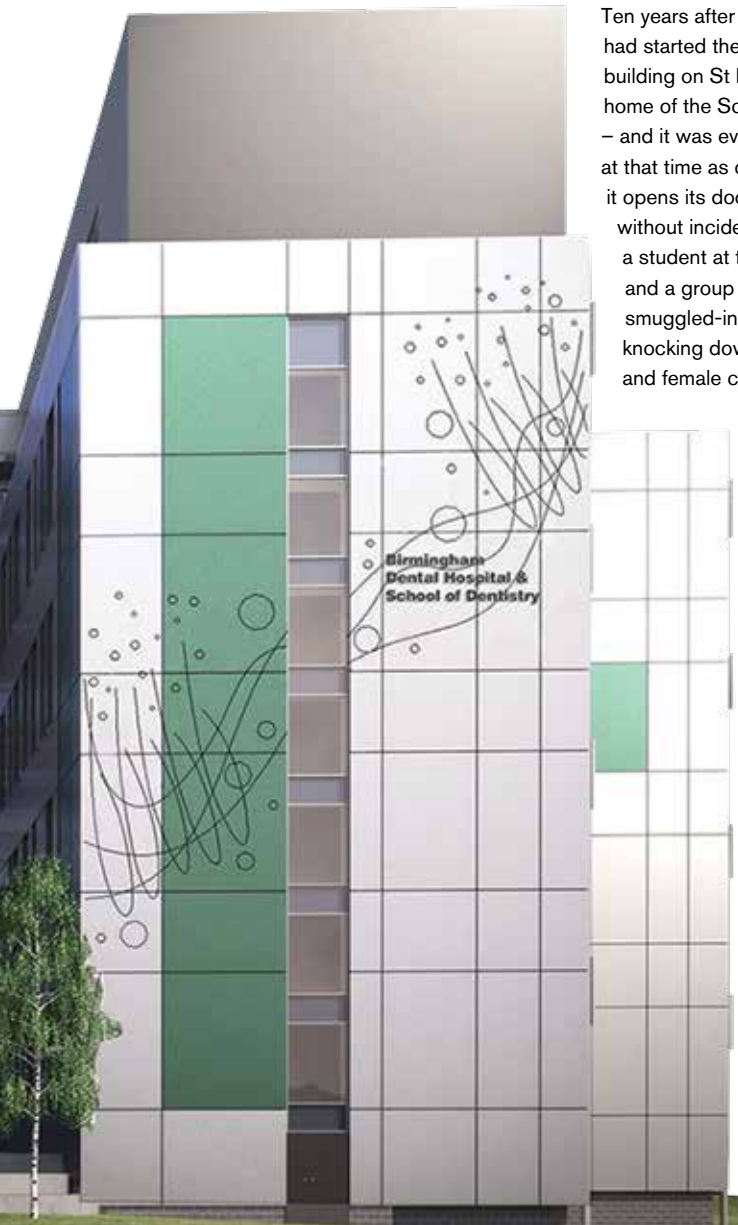
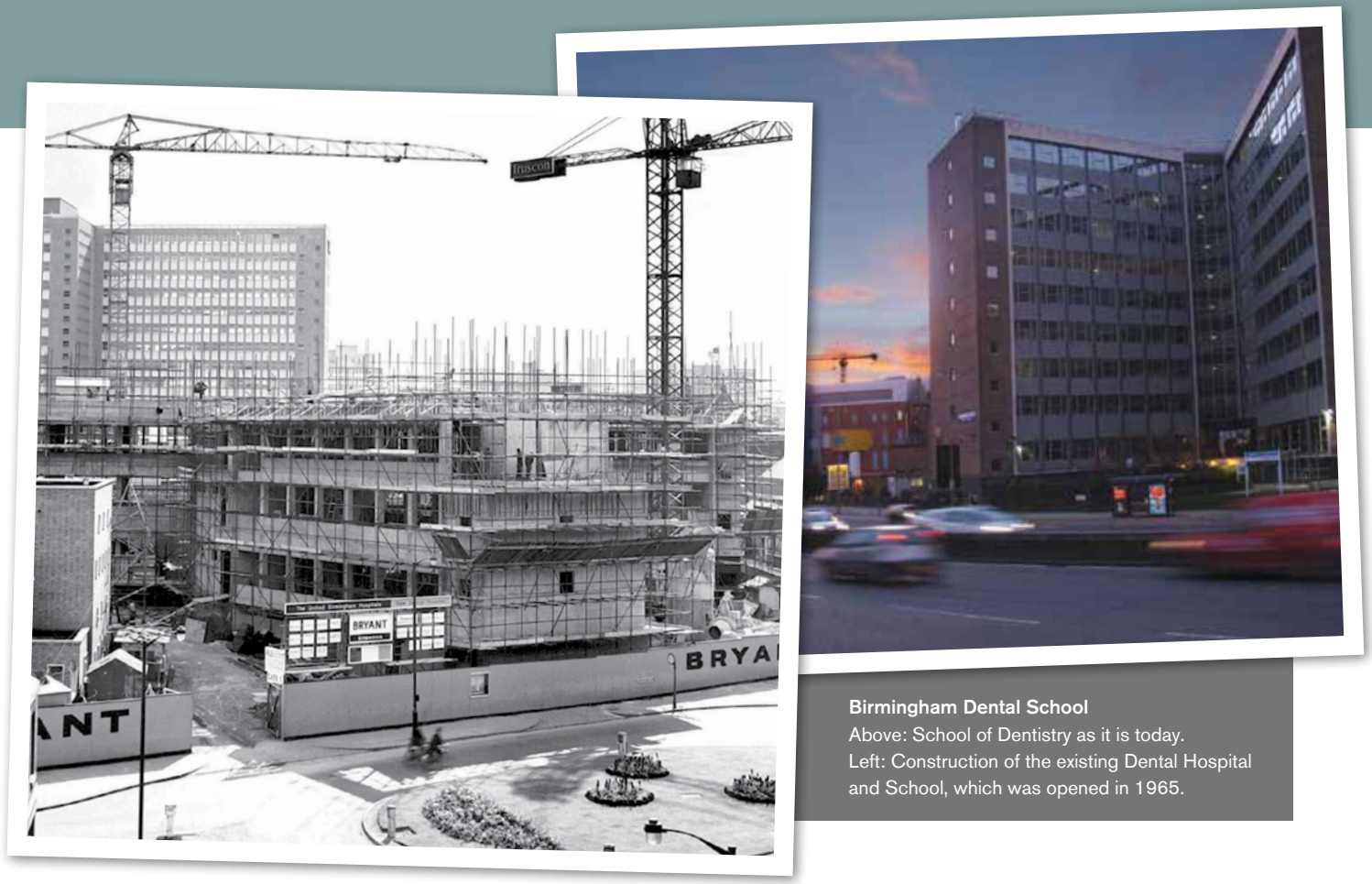


'The new hospital and school will provide modern facilities for students and staff closer to the University campus.'

Professor Philip Lumley, Head of the School of Dentistry



Birmingham Dental School
Above: School of Dentistry as it is today.
Left: Construction of the existing Dental Hospital and School, which was opened in 1965.

for the building we currently occupy, the new building will also incorporate the latest thinking, optimum building design, and of course, state-of-the-art facilities. Modernisation on the scale of this building would simply not be possible were the School and Hospital to remain in its current home.

Flexibility is key to the design of the new building – with the integration of the services comes a need for adaptability, for staff to be able to offer the service provision to patients dependent on their needs. Rather than having staff in a series of self-contained units, as the current building does, cut-off physically from one another, the design of the new building will allow staff this physical integration to complement the service amalgamation.

Professor Philip Lumley, Head of the School of Dentistry at the University said: 'As international leaders in research, teaching and clinical service within dentistry, the University of Birmingham School of Dentistry welcomed the opportunity to work with our partners on this ground-breaking building project. We look forward to continuing to work with Birmingham Dental Hospital and Birmingham Community Healthcare NHS Trust to deliver this project, and further develop innovations that will underpin the oral and dental healthcare of the people in the city and region.

'The new hospital and school will provide modern facilities for students and staff closer to the University campus. The re-provision of facilities secures the future of research, teaching and for the city and region as the current building will likely be demolished when we vacate it in view of the state of repair.'

And for students, the new building has one, very large material advantage over the old one, and that is its proximity to main campus. At just over a mile from Pebble Mill to the campus, dentistry students will be able to move easily between clinics, lectures, and social activities at both the Guild of Students, and the brand new sports centre on the Bristol Road, which will open shortly after the new School and Hospital in early 2016.

L–R: Dentistry student Youssef Mousa, Professor Philip Lumley and Dentistry student Yuhong He on site at Pebble Mill.

Thank you to Dr Peter Rock and Marina Tipton with help in sourcing the photographs.

My Birmingham thread

Alumni profile: Dr Janine Brooks MBE, DMed Eth, MSc, FFGDPUK, MCDH, DDPHRCS, FAcadMed, BDS

If you were looking for someone with impressive links to the School of Dentistry, Dr Janine Brooks would certainly fit the bill. She took her undergraduate degree here in the early '80s, came back for her Masters in 1988, and now teaches our first-year students. During her distinguished career, she's also become a highly-respected clinical director and successful businessperson. Here Janine recalls her time studying in Birmingham, and explains why she's keen to put something back into the place where it all started for her.

'I'll confess I never had a childhood urge to be a dentist,' Janine said. Instead, she decided on a career change after working as a medical laboratory technician. 'I was always interested in health,' she explained, 'and wanted a more rewarding role. Although I had other qualifications, I didn't have any A-levels. So when I went to meet the Admissions Tutor for a chat, I expected to be told to go away and get some.'

Instead, she got a much more forward-thinking reply. 'He told me to go ahead and apply. Birmingham's approach to mature students was far ahead of its time. That started the ball rolling, and my student life soon began.'

'We spent our first year on main campus,' Janine explained, 'studying with Medical School students. We shared human dissection classes, which back then were done without gloves. Even after plenty of scrubbing, the preservative smell was unmistakable. After a morning in labs,' she laughed, 'nobody would sit next to us in the canteen at lunch!'

But it was the move off-campus to the Dental Hospital that really changed things, 'It forged a strong sense of identity among us,' she said. 'Being at the Hospital made us feel like we had been truly embraced by Dentistry as a profession.' This created a strong bond with both her fellow students and the building itself, she explained. 'Although we were still part of the University,' at the Dental Hospital our allegiance shifted more towards our School and this made us feel special as undergraduates.'

It was at the Dental Hospital that students first started treating and working with patients ... Dealing with people with dental problems brought the real purpose of the degree into focus – in short, helping the public. 'You quickly learned how much trust they put in you, and how serious your job is,' she said. 'I still remember the first patient I treated. It was his birthday, and I remember wondering who was the most nervous, him or me?'

Janine returned to Birmingham in 1988 for her Masters in Community Dental Health. 'The course was well-respected and tough to get on to,' she said. 'It was a very positive experience.' After completing her Masters, Janine's career went from strength-to-strength. Amongst other notable achievements, she's held senior positions in the NHS, NHS Information Authority, National Clinical Assessment Service (NCAS) and at the Universities of Bristol and Northampton. In 2011 she launched Dentalia – her nationwide dental coaching and training consultancy. In 2007 she was thrilled to receive an MBE for services to dentistry.

Janine remains closely involved with Birmingham's Dental School and Hospital, to which she clearly has a powerful emotional link. As well as presenting awards to star students, she now teaches selected modules to freshers.

'I talk lots about networks in my writing and presentations,' she said, 'because they are so vital throughout your career. As an undergraduate, I started forming strong and supportive networks almost straight away. It was the same on my Masters, and I still see regularly see people from my intake.'

'My Birmingham thread is an interesting one,' Janine said, 'undergrad, postgrad, and now lecturing and presenting. It wasn't particularly planned - I simply took advantage of the excellent opportunities that came along. Over time, I've become increasingly proud of my Birmingham connections.'

It's this pride that's driven Janine to make a substantial donation towards the new Birmingham Dental Hospital and School of Dentistry. 'I think it's important that we support our chosen industry and fellow professionals whenever possible,' she said. 'Making a donation towards the new building is a great way to do this.'

'And it's personally satisfying to put something back into the place where it all began,' she said. 'Birmingham's Dental Hospital and School have always had a forward-looking approach, which helped both start and develop my career, and it's exciting to be involved in its ongoing developments.'

'I think it will really benefit students academically having the new building closer to the main campus. And based on my memories of student life,' she laughed, 'the local bars and restaurants of Selly Oak will welcome more dental students too.'

Support your School of Dentistry

The School of Dentistry would like to thank Dr Janine Brooks for her generous gift and ongoing support that will enable us to create a world class teaching environment and ensure we continue to be international leaders in oral and dental research.

If you would like to join Janine in making a gift to our new facility you can complete the donation form included and return to the address provided or alternatively you can call Ellie Griffiths on 0121 414 4012 or email e.griffiths.4@bham.ac.uk.

Learning and teaching for the next generation

Do you remember recording your clinical skills progress in white A5 log diaries, and filling in OMR forms to get your grades? Well, all this is starting to change thanks to staff in the School of Dentistry.

Joanna Batt and Upen Patel, Clinical Lecturers in Restorative Dentistry, are supporting Professor Giles Perryer in pursuit of a new customised, electronic learning and teaching tool. They have developed a system that enables students to record their progress electronically, which in turn gives staff access to far more comprehensive information, allowing them to better support students in the areas they need it.

There are two iPad-based systems currently being operated in the School of Dentistry – the Clinical Assessment and Feedback System (CAFS) which has now been in use for over a year, and the Practical Exercises Reflective Log (PERL) which is currently in its pilot stage. CAFS is used by students to reflect and obtain feedback on their work in the patient clinics, whereas PERL is used to record their progress in the Clinical Skills Suite, using aids such as the 'phantom head'.

CAFS and PERL are both 'web-apps'; this means they can be used on the students' iPads and also on any other computer with an internet connection. Staff working on the project were keen to stress the benefits of the new programs. Upen Patel said: 'We're using technology to identify the students who need extra support, help them earlier and ultimately improve patient safety.'

Joanna Batt added: 'PERL and CAFS hand responsibility back to the students to be self-critical, because they're re-examining their own work and doing so in the context of feedback they have received from their teachers.'

The background to the projects come from an increased focus by the General Dental Council on reflective learning, in its new document *Preparing for Practice*.

Both CAFS and PERL encourage students to think about what went well and perhaps not so well in the clinical tasks they have completed, and to set their own learning objectives as a result. PERL also allows users to upload images taken at various stages of a task so that students and tutors have a visual record of progress.

While the self-improvement benefits to students of reflective learning may be obvious, there are also many positive aspects for teaching staff too, as Upen Patel explains, 'With CAFS you can record how the student has performed over a number of key areas, not just their operative skills. For example, a student might be technically very competent but may have difficulty communicating effectively with patients, or colleagues. When we were using the paper-based OMR system, it was difficult to give a single grade to cover both. With CAFS, we can gather patient feedback and the student's own reflections on how they believe a session went, which enables us to give much more effective feedback, and award meaningful grades for different aspects of how they have managed their clinical session.'

Looking to the future, Joanna said: 'PERL and CAFS have the potential to integrate with other learning scenarios in Dentistry and further afield. The more experience we have with it, the easier it becomes to use in our day-to-day learning and teaching.'

This is just one of the many ways we are improving student support throughout the College of Medical and Dental Sciences. If you'd like to be a part of educating and supporting the next generation of Dental students, perhaps through mentoring or careers advice, please get in touch with the Alumni Team.

The dangers of buying equipment online

Dr Will Palin (BMedSc, 1998; MPhil, 2001; PhD, 2004; PG Cert, 2008)

The internet is an amazing invention. There aren't many of us who haven't 'googled' a piece of information to settle a heated debate, caught up on our favourite soaps days after they first aired or bought our entire Christmas shopping list from the comfort of the sofa. All of these examples are how the internet can be used positively. But what happens when it isn't?

Dr Will Palin, alumnus and now Reader in Biomaterials at the School of Dentistry, was approached by the BBC earlier this year to feature in an episode of the investigative consumer rights series *Fake Britain*, discussing the dangers of purchasing imported dental curing lights online.

Curing lights are essential for dental materials, such as tooth fillings, to harden and set. As part of the investigation by the Medicines and Healthcare products Regulatory Agency (MHRA), Dr Palin compared the performance of fake equipment against genuine curing lights. Perhaps unsurprisingly, the fake dental curing light performed worse in tests to discover how well it set a dental filling material. Significantly more concerning were the results of a further test to measure the temperature of the light emitted by the devices. Here, the increase in temperature of the counterfeit curing light was double that of the genuine light, and more importantly higher than the British Safety Standard.

Speaking on the BBC documentary, Dr Palin explained the effects this temperature increase can have on teeth: 'The implications of such a high temperature rise could mean that it kills the living part of the tooth, the cells that are contained within the pulp cavity, and if that happens there is risk that the restoration will fall out and potentially the patient may lose their tooth.

'It might be that the patient has to come back a week, two weeks later and either the material has failed, or there's been some secondary infection and ultimately the restoration will have to be replaced.

'The dentist is not necessarily going to know whether the material is cured effectively or not'.

According to Dr Palin there is a huge market for so-called 'grey imports' like the dental curing lights featured on the BBC documentary. But he believes the market should be the subject of stricter controls, 'There should be tighter regulation on what dentists can buy in terms of medical equipment. There's a whole grey market of dental products – anything from materials to toothbrushes. There's lots of it out there.'

Products manufactured in the UK are regulated but these rules do not apply to goods imported from non-regulated countries and it can be tough to spot fake equipment unless you have the specialist equipment to be able to test it.

The difference in price between fake and genuine equipment is staggering and so the financial advantages of buying imported equipment are obvious. Apparatus can be bought online for as little as £10, whereas legitimate goods could cost dentists up to £1,500.

It would be a massive undertaking to halt the trade of fake equipment online, but spreading awareness of the potential dangers of using such equipment on patients has to be a step in the right direction.

Dr Palin's 5 (mostly, common-sense) tips for buying dental equipment online:

- ☑ **Bargain price –** If the cost of a product seems too good to be true, then it probably is. Check costs against leading brands and general market prices.
- ☑ **Product description –** Check that the product is described in coherent English and that its description fits the purpose of use.
- ☑ **After sales care –** Look for reputable companies or distributors that offer return policies and user advice following the sale.
- ☑ **Website deception –** Do not be deceived by the style of a website. Manufacturers of fake goods will design professional looking pages to further the deception.
- ☑ **Supplier information –** Understand where the product is being purchased from. Check with large distributors that stock the same product.

Your reunions

Class of 1974

Class of 1973

Class of 1958

40th Anniversary Reunion (1974-2014)
A rather sprightly Peter Rock along with Professor Lumley shared some lighter moments at the 40th Reunion celebration of the Class of 1974 held at the Hyatt Regency Hotel Birmingham on Saturday 25th October 2014. With a great turnout of over half the year Professor Lumley reported on the latest developments regarding the new dental school building to open in the autumn of 2015 whilst Peter Rock shared some of his reminiscencies looking back on 40 years at the Dental School. Finally, the group were entertained by Dr Ray Lowry (Class of 1972) whose jokes and anecdotes finished the evening on a very enjoyable note.

Amazingly nobody seemed to have aged!

40th Anniversary Reunion (1973–2013)
On a wet and windy weekend in October 2013, 32 graduates of the class of 1969 met up again for their 40th Anniversary of graduation, at the Holiday Inn (Birmingham Airport). Having been a class that was truly integrational, where everyone was everyone's friend, and having met up at numerous anniversaries over the 40 years, (the last being the 30th), it was good to see that so many could again attend the 40th.

Many came from other continents such as Canada, USA, South Africa, and Europe. Many came for two nights, many brought their spouses, and some even played golf on the Saturday morning! There were 54 sitting down to dinner on the Saturday night, where the conversation was endless and the camaraderie unforgettable.

Unfortunately over the last few years, some of our colleagues had passed away, and there was a sad toast to absent friends.

Thanks go to Pippa Dathan who did the majority of the organisational work. We all look forward to the 45th Reunion in 2018.

55th Anniversary Reunion (1958–2013)
The graduates of 1958 celebrated their 55th anniversary at the Hilton Puckrup Hotel in Tewkesbury on 16th October.
Of the 32 graduates only 15 were able to attend (we have lost four and two we do not know about) and 11 tendered their apologies.

We had a wonderful time and our guest was Mrs Jean Jobes who was the PA to the Director at the time.'

Thank you to those that have sent in reports from their reunions.

Staff retirements

Gabrielle Stanley (BDS, 1970) Gabrielle Stanley has retired after 31 years involvement with undergraduate teaching in Paediatric Dentistry. Gabrielle was first seconded into the Dental School (from the Community Dental Service) in 1983 and took on a greater role as a University lecturer in 1998. Gabrielle has taught many generations of students in the Dental School and will be fondly remembered. In retirement Gabrielle plans to be able to spend more time with her grandson who lives in Italy.

John Hamburger (BDS, 1976, MSc, 1978) John Hamburger has retired after 35 years in the School of Dentistry. He started as a Junior House Officer at Birmingham Dental Hospital in 1997 and worked his way up to Senior Lecturer and Honorary Consultant in Oral Medicine. Throughout his career John has held many senior positions including President and Fellow of the British Society for Oral Medicine. Many students will also remember him for being the Welfare Tutor 1994–2000. In retirement John plans to indulge in his many hobbies such as walking, skiing, photography and enjoying classical music. He also plans to stay in touch with his friends and colleagues whose company, advice and support he has enjoyed over many years.

After first coming onto the teaching staff over 30 years ago, **Kathy Waldron** has now retired. Many cohorts of student will recall her as a head of a third year firm, and more recently a year four head of firm in Clinical Practice. Here she is pictured some of her last fourth year students, who presented her with a gift and treated her to lunch at Pizza Express.

New staff

Polly Walker has joined the University as an instructor in technical dental methods. Polly gained a degree in dental technology from Manchester Metropolitan University in 2001. She has since worked in a variety of private and NHS hospital laboratories including Manchester Dental Hospital and was previously worked for the last six years as a senior dental technician in the prosthetics laboratory at Birmingham Dental Hospital. She acknowledges that having a familiarity with the hospital has certainly made the transition to the University easier!

Polly said: 'I am enjoying the interaction with the students and observing as they progress and develop with each session. The University has also been supportive and encouraging towards self-development which has been very welcoming.'

Philip Murphy joined the School in June as senior dental instructor. Predominantly working on the 8th floor, his post involves both technical and research work in the department.

Previously he managed and worked in the Prosthetics Production Laboratory at the Birmingham Dental Hospital for 21 years, where he also did his dental studies and qualified. Having been brought up in Edgbaston, the Dental hospital and University is an ideally location for Phil to work and enables him to seek a fresh and exciting challenge to utilise his skills and add value.

Phil enjoys playing golf and is a member of Handsworth golf club and Competitions Director. He also represents Warwickshire county team.

Distance learning in dentistry: an update

It's now 18 months since our MSc in Advanced General Dental Practice was introduced as a distance learning course in response to a growing need for dentists to fit learning in around other commitments.

The programme previously ran as an attendance-based taught course for 11 years. The first cohort of distance-learning students are now nearly midway through their studies, with a new cohort beginning in October.

We spoke to Academic Lead for the MSc, Professor Giles Perryer, who developed the course together with Course Director Professor Trevor Burke, to find out more about the programme.

The main development has been that the course now has reduced tuition fees of £15,900 and lasts for two years as opposed to three, but this can be lengthened depending on individuals' circumstances as Professor Perryer explains, 'From now on we're flexible as to how long somebody takes to complete the MSc. We start off nominally with two years but it can take between two and five years, it's up to the student. Some people have lots of free time and other people are working five days a week and have hardly any free time. You can adapt the speed to your own work and home life requirements.'

Twenty students have enrolled on the course each year, with learners coming from as far afield as the Middle East and New Zealand to attend the two intensive residential weeks that form part of the course, based in the School's simulation labs. 'The camaraderie and the feedback on the residential weeks is extraordinary, students really enjoy them,' says Professor Perryer, 'The residentials allow us to both teach and assess students physically restoring teeth. If you're doing a degree in Dentistry it's very important that it has practical elements in the teaching.'

Professor Perryer is also Academic Lead for the University of Birmingham's MOOCs (Massive Open Online Courses), which are free short courses run through the FutureLearn website. A recent programme using this method of teaching and run by Professor Perryer and his colleague Mike Sharland called 'Improving your Image: Dental Photography in Practice', was completed by around 2,000 people. This course will be re-run in early 2015, and there are many other programmes starting over the next few months on a variety of non-dental topics, and all are free to study.

Find out more about the MSc in Advanced General Dental Practice (distance learning) and apply on our website at www.birmingham.ac.uk/dentalpractice-distance or call our Course Team on (0121) 466 5477.

In remembrance

Andy Holden (BDS 1973) 1949–2014
Andy Holden, who died aged 65 on 4 January, was an international athlete and committed NHS-only dentist until he retired aged 61.

He was UK record holder for the 3,000 metre steeplechase and a runner of remarkable versatility, achieving the unique feat of representing Great Britain in five distance disciplines: roads, cross-country, fells, and indoors and outdoors on track.

In an era when the exceptional amateur could still excel in athletics, Andy managed to compete at the highest level without sacrificing his passion for real ale.

He reputedly drank ten pints of beer the night before winning the Bermuda marathon in 1979, a race which saw him break Ron Hill's course record and beat a world-class field.

One of his best known tricks was to stand on his head and down a pint, and he once achieved an ambition to run 100 miles and drink 100 pints in a single week.

Born in Leyland, Lancashire, Andy studied dentistry at the University of Birmingham and remained in the West Midlands.

Holden was opposed to the privatisation of dentistry, fearing that those in need could find it more difficult to access services. He worked as an associate at surgeries in Kings Norton and Solihull. He owned practices in Billesley, then Coseley, where he spent the last 25 years of his career.

On one occasion, he went to a Coseley pub to extract the tooth of a pub landlord, who was terrified of dentists. Andy had spotted the bar owner dithering outside the surgery, then retreating. With his dental nurse, he went to the pub, stood the landlord under a dartboard spotlight, gave him a mouthful of whisky and yanked the tooth out.

His athletics accolades included winning the 1969 English junior cross-country championships, and competing at the Munich Olympics in 1972 – the year he set the UK 3,000 m steeplechase record (8 min 26.4 sec). He won world cross-country gold for England in 1979, and a string of marathons – including Bermuda three times.

After striding clear of the field in the 1986 Belfast Marathon, he was led astray by the lead car – twice. He still managed to finish second, and joked afterwards: 'It's just one of those things which happen – it was an Irish marathon.'

Holden was a dedicated coach to hundreds of youngsters at Tipton Harriers and liked nothing better than to turn out for the club, however small the meeting. He once resuscitated a fellow runner who had collapsed after a training run. Among peers, he was known for his good deeds.

On one run, he came across a dog that was weighed down with bricks in a canal. He adopted it, and Schnicky became his faithful running companion for many years.
Andy Holden, who three years ago suffered an aortic aneurysm, is survived by his wife, Paula, and by their three sons and one daughter.

This obituary is taken from the BDJ and is based on excerpts taken from Andy Holden's obituary published in the 'Telegraph', 14 Jan 2014.

DentalROOTS

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