



Her Majesty the Queen rewards School research which made the streets safer

Words of wisdom



Rhagair

roeso i'r ail rifyn o wisdom, cylchgrawn blynyddol Ysgol Deintyddiaeth Caerdydd. Wrth i ni gyrraedd diwedd y sesiwn academaidd, dyma edrych yn ôl ar flwyddyn brysur arall i'r Ysgol a gweld bod llwyddiant yr Ysgol yn parhau. Cawsom staff newydd a chyfleusterau newydd a chydnabyddiaeth amlwg iawn i'n gweithgareddau addysgol a'n hymchwil.

Yn gynnar yn y flwyddyn academaidd, cawsom y newyddion gwych fod y Brifysgol wedi ennill Gwobr Pen-blwydd y Frenhines am waith Gr p Ymchwil Trais a Chymdeithas yr Ysgol dan arweiniad yr Athro Jonathan Shepherd. Mae'r wobr nodedig honno'n cydnabod dros ddegawd o waith ymchwil sydd wedi'i ddatblygu'n ymagweddau amlasiantaethol at rwystro trais. Mae'n gamp nodedig iawn. Cyflwynwyd y wobr i'r Brifysgol a'r Ysgol gan Ei Huchelder Brenhinol y Frenhines Elizabeth II ym mis Chwefror, a chewch ddarllen

elcome to the second issue of wisdom, the Cardiff School of Dentistry's annual magazine. As we reach the end of the academic session we reflect back upon another busy year for the School, which has seen

session we reflect back upon another busy year for the School, which has seen a continuation of the School's growth and success, with new staff and new facilities, and high-profile recognition of our educational and research activities.

Early in the academic year we had the fantastic news that the University had won the Queen's Anniversary Prize for the work undertaken by the School's Violence & Society Research Group, led by Professor Jonathan Shepherd. This prestigious prize recognises more than a decade of research work that has been translated into multi-agency approaches to violence prevention, and is an outstanding achievement. The prize was presented to the University and the School by Her Royal Highness Queen Elizabeth II in February, and you can read more about this on the centre pages of this issue.

The start of the academic year also saw Professor Bing Song and his research team start in the School. Professor Song's research is focused upon wound healing and tissue regeneration, and he has brought to the School Despite the ongoing economic downturn, this year has seen a continuation of the School's investment in its facilities"

the University's first European Research Council grant, plus significant awards from the Royal Society and Wellcome Trust, and we are very excited about the contribution he will make to our research activities.

Elsewhere, the School is continuing to focus attention on undertaking a major review of its educational provision and resource utilisation with a view to improving the quality of the student experience. An update is provided within these pages, and we anticipate on reporting in future upon some fundamental improvements to the way in which we manage and provide our educational activities.

Despite the ongoing economic downturn, this year has also seen a continuation of the School's investment in its facilities, with research laboratory refurbishments, upgrades to educational facilities and the establishment of a dedicated suite for postgraduate students. The School

is committed to providing the best possible platform for the activities of its staff and students, and a key part of our strategy is to ensure we are able to improve our facilities on an

ongoing basis. We report on these, and other, developments in this issue.

Finally, after four busy years in the role of Dean/General Manager I will be stepping down in August to become Deputy Vice Chancellor of Cardiff University. I would like to take this opportunity to thank all staff, both University and NHS, students, alumni, and other partners for their help and support during my time as Dean, which has seen the School continue its development as a leader of academic and clinical excellence. My successor will be Professor Mike Lewis, and I wish him every success.

As always, we are keen to hear any feedback you may have on the magazine. This can be done by emailing us at wisdom@cardiff.ac.uk.

I hope you enjoy this edition of wisdom,

Professor Elizabeth Treasure, Dean



ALUMNI PROFILE: PAUL LANGMAID

"Having a dental degree almost guaranteed a job, but professional responsibilities came with it" p. 17

v Deon

Ar ddechrau'r flwyddyn academaidd hefyd gwelsom yr Athro Bing Song a'i dîm ymchwil yn cychwyn yn yr Ysgol. Canolbwynt ymchwil yr Athro Song yw iacháu clwyfau ac atffurfio meinwe, a daeth yr Athro i'r Ysgol â'r grant cyntaf i'r Brifysgol gan y Cyngor Ymchwil Ewropeaidd, ynghyd â dyfarniadau sylweddol gan y Gymdeithas Frenhinol ac

rhagor am hynny ar dudalennau canol y rhifyn hwn.

Ymddiriedolaeth Wellcome. Edrychwn ymlaen yn eiddgar at y cyfraniad a wnaiff ef i'n gweithgareddau ymchwil.

Mewn meysydd eraill, mae'r Ysgol yn dal i hoelio'i sylw ar gynnal adolygiad mawr o'i darpariaeth addysgol a'i defnydd o adnoddau er mwyn ceisio gwella'r profiad a gaiff ein myfyrwyr. Cewch y diweddaraf yn y tudalennau hyn, a rhagwelwn sôn yn y dyfodol am rai gwelliannau sylfaenol yn y ffordd yr ydym ni'n rheoli ac yn darparu'n gweithgareddau addysgol.

Er bod y wasgfa economaidd yn parhau, mae'r

flwyddyn hefyd wedi gweld yr Ysgol yn dal i fuddsoddi yn ei chyfleusterau drwy ailwampio labordai ymchwil, uwchraddio'i chyfleusterau addysgol a sefydlu man pwrpasol i'w myfyrwyr ôl-raddedig. Gan fod yr Ysgol wedi ymrwymo i ddarparu'r llwyfan gorau posibl i weithgareddau ei staff a'i myfyrwyr, rhan allweddol o'n strategaeth yw sicrhau ein bod ni'n dal i allu gwella'n cyfleusterau. Cewch adroddiad ar y datblygiadau hynny, a chamau eraill, yn y rhifyn hwn.

Yn olaf, ar ôl pedair blynedd prysur fel Deon/ Rheolwr Cyffredinol, byddaf yn symud ym mis Awst i fod yn Ddirprwy Is-Ganghellor Prifysgol Caerdydd. Hoffwn fanteisio ar y cyfle i ddiolch i'r holl staff, o'r Brifysgol a'r GIG, ein holl fyfyrwyr, ein cynfyfyrwyr a'n partneriaid eraill am eu cymorth a'u cefnogaeth tra bûm i'n Ddeon - cyfnod a welodd yr Ysgol yn parhau i ddatblygu'n arweinydd rhagoriaeth academaidd a chlinigol. Fy olynydd fydd yr Athro Mike Lewis, a dymunaf bob llwyddiant iddo.

Fel erioed, yr ydym yn awyddus i gael eich sylwadau ar y cylchgrawn hwn. Anfonwch e-bost atom i wisdom@caerdydd.ac.uk.

Gobeithio y cewch chi flas ar y rhifyn hwn o wisdom.

Yr Athro Elizabeth Treasure, Deon



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A warm welcome to Professor Mike Lewis. the Cardiff School of Dentistry's new Dean





Young Writer of the Year



Dr Chris Lynch, Senior Clinical Lecturer and Honorary Consultant in Restorative Dentistry, was awarded the first prize in the British Dental Editors Forum (BDEF) Young Writer Award for 2008/2009, at a recent ceremony at the British Dental Association in London.

The BDEF is compromised of UK-based editors of dental journals, and is a forum by which editors meet and share ideas with the aim of encouraging quality and, in turn, confidence in dental publications and journals. The award is sponsored by the British Dental Trade Association (BDTA).

The purpose of the Young Writer Award is to recognise outstanding young dental writers, who have made a significant contribution to dental literature, and to identify and encourage those with the potential to become editors of dental journals in the future. Based on a nomination and selection process, Dr Lynch was awarded first prize in the Young Writers Award category for 2008/2009.



Around 10,000 people in England, Wales and Northern Ireland have had their teeth examined as part of the Adult Dental Health Survey. The research, undertaken in partnership with the Office for National Statistics (ONS) and researchers in a number of UK dental schools, has investigated attitudes to dental hygiene and treatment. In tandem with results from earlier similar surveys this snapshot will identify trends in dental health and the way in which people seek treatment, with the data that has been collected being analysed and used to inform how NHS dental services can make best use of their funding.

Professor Elizabeth Treasure, Dean of the School of Dentistry and one of the authors of the 1998 Adult Dental Health Survey, and Professor Barbara Chadwick, Head of the Paediatric Dental Unit, took part in this iteration of the project. Professor Chadwick says: "The findings of the Adult Dental Health Survey is an essential element in the planning of dental services, and I was delighted to be involved. I hope that once the data has been analysed we will be able to demonstrate a continuation of the improving dental health of people throughout the UK."

The survey involved each participant being interviewed about attitudes to dental care before having a dental examination. 80 dentists from across the United Kingdom were recruited by the Survey Team to participate in the examinations and were trained in Newport in autumn 2009 before beginning the survey.

School helps out Welsh rugby team for 6 Nations

Staff and students from the School came to the aid of the Welsh national rugby team in January as it prepared for the 6 Nations tournament at the Vale of Glamorgan hotel.

Professor Jeremy Rees was contacted by BiteTech, a company who helps supply kit to the team, requesting at short notice whether he would be able to take 30 sets of impressions for mouth guards for the players. The catch? To do it in one hour!

Thankfully, 20 fourth- and fifth-year students volunteered to spend their lunch hour helping take the impressions, with assistance from production laboratory staff. The impressions were then cast within 24 hours and sent to the BiteTech production facility in Florida, USA, before being returned to the team in time for their opening tournament game against England at Twickenham.

Professor Rees explains: "The staff and students were delighted to help the national team with their preparations, and it was a fantastic experience. Unfortunately, the mouth guards did not help the team win!"

Professor Mike Lewis was invited to a reception at 10 Downing Street in October 2009 to mark the launch of a handbook for the medical profession on lupus. The charity LUPUS UK has prepared a guide on the diagnosis and treatment of lupus for general practitioners and associated health professionals. Professor Lewis provided the chapter on oral aspects of lupus and their management.



Gwen Adey, one of the School's Walport Academic Clinical Fellows, won the Poster Prize at the International Network for Brief Interventions for Alcohol Problems (INEBRIA) 2009 conference.

INEBRIA was Gwen's first external research conference and she presented a poster entitled The Expected Emotional and Financial Costs and Benefits of Alcohol Consumption in Young People. Gwen's PhD supervisors are Dr Simon Moore and Professor Ivor Chestnutt.



2009 dental graduate Zoe Clarke has been named the St David's Primary Care Dental Unit's inaugural 'Student of the Year'.

The award, voted for by all staff at St David's, recognises the University dental student who has displayed the highest levels of professionalism, clinical competence and teamwork during their clinical placement.

Established in May 2002 the Unit, a joint venture between the School of Dentistry and Cardiff and the Vale NHS Trust, is designed to combine community dental care with teaching. The Unit offers the opportunity for fifth-year dental

students to each treat on average six patients per day and, under supervision, take responsibility for individual diagnosis and treatment. The Unit's surgeries are equipped with the latest dental technology

including digital radiography intra-oral cameras. The technology enables patients to see inside their own mouths to help understand the reasons for their treatment.

Mr John Llewelyn, Dental Clinical lecturer at St David's said: "On behalf of all staff at the Unit, I congratulate Zoe on her award and achievement. The award recognises her high standards of professionalism, clinical competence and work during her time at the Unit. We all wish Zoe well in her dental career."

The award was an engraved 'Alegra' LED handpiece provided by award sponsor W&H.

A learning curve

Thanks to the MDE programme, the School of Dentistry is about to overhaul how it delivers its courses and

further improve its learning experience

♦ integration, where possible, between dentist, hygienist and therapist training being actively built into the curriculum via the identification of opportunities for team-working.

Additionally, MDE has also highlighted numerous 'quick wins', particularly in the areas of timetabling, resource utilisation, IT, and assessment and feedback. These 'quick wins' will ensure continuous improvements are introduced throughout the year to benefit the staff and students in the short term while the strategic objectives are being planned and implemented.

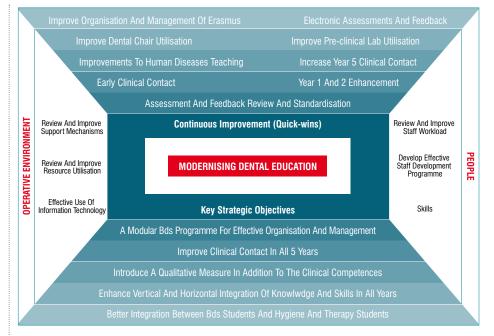
Professor Elizabeth Treasure, Dean of the School and Director of the Dental Division of the Cardiff & Vale University

novel approach to reviewing the effectiveness of student education has made a series of recommendations that will fundamentally change the way in which the School delivers and supports its courses, particularly the Bachelor of Dental Surgery.

The Modernising Dental Education (MDE) programme of projects is a joint School of Dentistry and Cardiff & Vale University Health Board initiative to review educational provision and resource utilisation within the University Dental Hospital, community-based clinics and primary care dental education units.

Over the past year MDE has obtained feedback on how to improve the delivery of the educational activities from many of the School's stakeholders, including staff, past and present students and vocational trainers. In addition, Ms Manjit Bansal, MDE Project Manager, and Professor Paul Dummer, Vice-Dean for Learning & Teaching, have visited dental schools across the UK and Europe to view examples of best practice that may contribute to providing an enhanced learning experience for current and future students.

This work, in tandem with detailed in-house analysis of the content and management of the School's courses, has resulted in key strategic



recommendations that will be planned and implemented over the course of the next two sessions. These recommendations include:

- moving the Bachelor of Dental Surgery (BDS) programme to a modular structure;
- the introduction of clinical contact into the BDS at an earlier stage;
- integration of the basic sciences

and the clinical components of the BDS throughout the five years as part of a wider review of the student learning pathway;

in addition to the competency based clinical assessment system, the introduction of a quantitative measure to ensure students acquire appropriate levels of clinical experience; and

Health Board, explains: "MDE is the key strategic priority for the School over the coming years. Our core aim as a School is to provide the best learning experience for students and to produce the best graduates we possibly can. By dedicating time and energy to this period of self-reflection, the School will be ensuring that it continues to produce outstanding graduates, fully equipped for their future professional careers, and that we make optimal use of the resources at our disposal - all of which will benefit patient care."

Ms Manjit Bansal, the MDE Project Manager, adds: "MDE has now started working with staff within the School and University Dental Hospital to design, plan and implement the recommendations, with a view to the 'quick wins' being rolled-out between now and September 2010, and the more strategic recommendations from academic session 2011/12 onwards. This planning will involve further consultation with the School's stakeholders, particularly staff and students, to ensure the key objectives of the changes are achieved."



Cardiff staff at

Staff from the School were, once again, prominent at the annual Association for Dental Education in Europe (ADEE) meeting, held in September 2009 in Helsinki.

The theme of the meeting was Lifelong Learning and Continuing Dental Education, and it was fitting that the newly appointed Director of Postgraduate Dental Education at Cardiff, Professor Jon Cowpe, led a Special Interest Group on Lifelong Learning. Other School staff who presented posters or led Special Interest Groups at the conference included Sheila Oliver, Dr Shelagh Thompson, Professor Richard Oliver (ADEE Ambassador to the UK and Ireland), Peter Ash and Dr Alan Gilmour.

Under the presidency of Professor Malcolm Jones, former Dean of the School of Dentistry, the ADEE has made its presence known with the European Parliament, employing a consultancy firm to lobby on its behalf. The ADEE has also published a revised version of the document Profile and Competences for the Graduating European Dentist, which does for Europe what the GDC's First Five Years document does for the UK.



Delegates taking a break from the presentations and having coffee in the Trade Exhibition



Delegates visiting the Poster Display at ADEE



The past year has seen the first cohorts of students enrolled on the School's two new postgraduate programmes, the Masters in Clinical Dentistry (MClinDent) and the MSc in Implantology.

The MClinDent Programme provides students with the opportunity to participate in a full-time three-year specialist training programme in either Endodontology or Prosthodontics. The programme has been designed to enhance student life-long learning skills; aid in developing evidencebased practice; develop advanced clinical skills to enable students to become mono-specialists in Endodontology or Fixed and Removable Prosthodontics and, through acquisition of research knowledge, skills and the production of a research project, facilitate further career development.

The MSc in Implantology programme offers a truly unique modular scheme, designed to provide students from a professional dental background with an extensive

understanding of the science and practice of implantology; from theoretical science through restorative treatment planning to clinical practice in the direct management of patients requiring fixed and removable implant-retained prostheses.

The course will facilitate professional and personal growth

through a wide range of educational and direct clinical experiences, designed to be the most suitable combination of skills for the practice of dental implantology. More details of these, and the rest of the School's postgraduate courses, can be found at: www. cardiff.ac.uk/dentl/ degreeprogrammes.

The course will facilitate professional and personal growth"



ardiff students are benefiting from the establishment of new and improved study facilities within the University Dental Hospital, as the School continues its investment in its learning environment.

Completed last summer, facilities include an IT training room and refurbished student study areas with a dedicated postgraduate study suite to accommodate the School's growing numbers of students on its postgraduate courses.

The postgraduate study suite has a dedicated common room, quiet and group study areas, extensive IT access and additional storage facilities. The area enables students across the School's five postgraduate courses to have modern purpose-built facilities and space to interact with each other, of particular importance to the School's growing number of overseas students.

Elsewhere, adjacent to the Brian Cooke Dental Library, the new Group Study Room will provide bookable study facilities for all students who need space to discuss and practice presentations. In the same area a new IT training room has been established, enabling the School to provide European Computer Driving Licence training and testing, Information Skills training, workshops and Oral Ecosystems practicals.

In addition, computers have been installed in the undergraduate common room, allowing students to access









BlackBoard, emails and other learning materials in a relaxed setting.

Dr Alastair Sloan, Senior Lecturer in Bone Biology and Tissue Engineering, explains: "The new group study area has allowed students to work together in their own space, giving them the room to work properly as a team to address their problem based learning topics and presentations. The new IT training room and re-equipping of seminar room

easier for students to work alone or in a group, and to have access to all the information they need 33



facilities has enabled the Oral Ecosystems practical histology classes to all go digital, enabling interactive sessions to be run much like a tutorial, and improving the learning experience for the student."

Angharad Truman, President of the Dental Student Society, adds: "The new facilities are excellent, making it easier for students to work alone or in a group, and to have access to all the information they need."

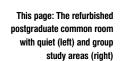


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ioneering School of Dentistry research, which has transformed local, national and international policy on violence, has been recognised by a prestigious award from Her Majesty the Queen.

Her Majesty and the Duke of Edinburgh presented the Vice-Chancellor, Dr David Grant, and Professor Jonathan Shepherd with a Queen's Anniversary Prize for Higher Education. Professor Shepherd is Director of the School's Violence and Society Research Group, which won the award for the University for its work on late-night violence in city centres.

The Research Group was formed in 1996 by Professor Shepherd who wanted to prevent the facial injuries he was treating as a surgeon at the University Hospital. It is a cross-disciplinary team including academics from the University's Schools of Dentistry, Medicine, Business and Psychology. Findings from the Group's research have been used to tackle late-night injuries in city centres.

"Weekend after weekend I was seeing patients who'd been glassed, punched and kicked in pubs and clubs," explains Professor Shepherd. "All these injuries seemed to me to be eminently preventable, but our research in Bristol, Cardiff and Swansea was consistently telling us that three-quarters of violent incidents which resulted in Accident & Emergency (A&E) department visits did not appear in police records".

Professor Shepherd established a new police, health, local government and voluntary sector partnership in which data key to violence prevention could be shared. The effectiveness of this partnership approach took several years to be fully realized, but in 2007 Cardiff became the safest city in its Home Office designated 'most similar' city group.

A particular concern had been the number of 'glassing' incidents in Cardiff. The numbers fell by c.70% following the decision of the Cardiff Licensing Committee to impose a plastic glass condition on pub and nightclub licences in the city centre. Nationally, there was a significant fall in glass and bottle assaults after the UK glass industry switched from annealed to tempered glassware in the latest 1990s. Both steps were the results of the Group's research and advocacy.



The Queen's Anniversary Prize has been invaluable in increasing interest in our continuing work on city centre crime and its consequences"

After licensed premises and street crowding were identified by the Group as risk factors for violence, they successfully advocated the pedestrianisation of St Mary Street in Cardiff. League tables of violent licensed premises were also compiled from A&E data and published in local media, with licensees informed that safety in their premises was being closely scrutinised. The effectiveness of interventions was evaluated in part by breathalysing drinkers in the street.

But the key breakthrough came when the police, council and licensees agreed to pool information to chart where and how trouble started, and therefore predict it in the future.

"Since 1996 every time someone comes through A&E with any sort of injury where alcohol is a contributory factor the police are told where and when it happened, and what weapon was used" said Prof Shepherd. "This data sharing enterprise was taken up by the Home Office in the 2008 Tackling Violence Action Plan and more than 120 hospitals in England and Wales now share data for violence prevention".

Since the award, the Group has continued to have an impact. It has published a new study that shows that delinquent boys are more likely to suffer death or disability by middle age and the Design Council has unveiled a new type of shatter-proof glass.

Professor Shepherd says: "The Queen's Anniversary Prize has been invaluable in increasing interest in our continuing work on city centre crime and its consequences."

Vice-Chancellor, Dr David Grant adds: "This is not just a triumph for Cardiff University, but for our entire community. It is a perfect example of how academic excellence can bring practical benefits."



New findings by the Violence & Society Research Group will be rolled out across NHS Wales. The Group has found that it is possible to detect alcohol misuse and treat it using motivational interviews when patients with injuries return to hospital trauma and maxillofacial clinics for standard injury care.

The project is the first Knowledge Transfer Partnership (KTP) in the public sector. KTP is a part-government funded Technology Strategy Board scheme designed to help businesses and other organisations such as the NHS by tapping into and utilising the knowledge and expertise

that resides in universities.

Patients who return to hospital for treatment after a drink related injury will receive advice from nurses in a bid to help them change their drinking habits. Nurses at hospitals across Wales are being encouraged to sign up for the programme and receive training in delivering the intervention.

Dr Tony Jewell, Chief Medical Officer for Wales, explains:
"The Welsh Assembly
Government's substance
misuse strategy has
provided the impetus for
the provision of training in
how to identify high-risk
individuals and how to
give advice in primary
care settings, A&E
departments and other
settings.

"In my recent letter to the service I highlighted the need to educate people about the health risks associated with exceeding safe drinking limits and make sure the health service takes this opportunity to engage fully in this training programme. Binge drinking culture is getting worse in Wales. Evidence-based interventions will help reduce the long-term damage from excessive drinking and the increasing burden on the NHS."



The University has added to its existing cutting-edge research expertise in the area of wound healing and tissue regeneration by recruiting a new Professor with several prestigious research awards

Professor Bing Song has joined the School of Dentistry and Cardiff Institute of Tissue Engineering and Repair and has a whole host of key international research links. His main research interests are in electric signal regulation of cell migration, division and differentiation in wound healing and tissue regeneration. He will work closely with Professors Min Zhao from the University of California, Peter Devreotes from Johns Hopkins University School of Medicine, USA and Josef Penninger IMBA from the Austrian Academy of Sciences in Austria on signalling cascades that regulate electric signals controlling directional cell migration.

Professor Song explains: "I am delighted to have joined the University's School of Dentistry at such an exciting time for the key area of wound healing and tissue regeneration research.

"Our short-term priority is to investigate controlling mechanisms of stem cell migration, division, differentiation in replacement therapy of neurodegenerative diseases.

"We hope to build on the excellent national and international links that have already developed and use these collaborations to further broaden up national and international networks for not only the School of Dentistry, but for the wider University community."

Professor Song was awarded a prestigious eight-year Royal Society University Research Fellowship in 2005

ROYAL LAUNCH FOR ARTHRITIS RESEARCH CENTRE

His Royal Highness, The Duke of Gloucester officially opened a major new research centre at the University.

The Arthritis Research Campaign Biomechanics and Bioengineering Centre is dedicated to world-leading interdisciplinary research to tackle arthritis. It brings together experts in a number of different research fields to advance understanding of arthritis and generate new treatments.

More than 8m people in the UK are affected by arthritis, a major cause of disability. Sufferers experience stiff, painful and inflamed joints, for which there is no treatment other than symptom relief, and ultimately joint replacement.

The Centre is funded by £2.5m from The Arthritis Research Campaign over five years and £7.5m from the University. Engineers, biomedical scientists and medical experts including orthopaedic surgeons, rheumatologists





and in the last two years has attracted significant funding for his research. This includes a recently awarded five-year research grant of £1.5m from the European Research Council, the first such grant held by the University.

As well as significant international collaborations, Professor Song is actively collaborating with other members of the School of Dentistry including Professor Dave Thomas on biomedical systems of slow drug release, Professor Phil Stephens on migration and differentiation control of oral progenitor cells and Drs Rachel Waddington and Alastair Sloan on potential therapeutic applications using dental pulp stem cells.

and physiotherapists will drive research at the Centre. The aim is to translate their work directly to patient benefit in a 'molecule to man' approach.

Professor Daniel Aeschlimann of the School of Dentistry explains: "We've analysed osteoarthritis and rheumatoid arthritis joint tissue and already identified several candidate marker molecules that look promising for clinical use. Once the tests are developed we'll use them to confirm that disease is present, and monitor disease progression and response to therapy. This could allow patients to be treated earlier during disease development before irreversible joint damage occurs."

Pain is a major factor in arthritis and an exciting new aspect of the research is to relate molecular changes in the joint to pain and inflammation, to show how overworked joints are linked to pain and disease development. This new information will help the team to devise and develop improved treatments such as better drugs and physical therapies.

Cardiff University Vice-Chancellor, Dr David Grant, says: "That the Arthritis Research Campaign selected Cardiff to establish a national centre of excellence is testament to the world-leading academic expertise and state-of-the-art facilities at each of the academic Schools and Imaging Centres involved in the bid."

Meet the staff

Dr Sharon DewittTISSUE ENGINEERING & REPARATIVE DENTISTRY

Dr Sharon Dewitt has recently been selected for one of the prestigious Cardiff Academic Fellow posts funded by the Arthritis Research Campaign, and has joined the School's Matrix Biology Research Group. Dr Dewitt will play a key role in achieving the research goals within the Biomechanics, Inflammation & Pain strand of the recently established ARC Centre of Excellence for Biomechanics and Bioengineering.

Dr Dewitt's background is in inflammatory cell biology, with her research interests concerned with identifying the early cellular events that occur in disease processes. Dr Dewitt explains: "We can then target these early events, either by exploiting them as indicators of disease to enable early diagnosis and treatment."



Over the next five years, she will work with the School's Professor Aeschlimann and other members of the ARCBBC team on developing biomarker assays that predict pathology, pain, inflammation and changes in joint function in musculoskeletal diseases.

Hashmat Popat APPLIED CLINICAL RESEARCH & PUBLIC HEALTH



Hashmat Popat is a Clinical Lecturer/Academic FTTA in Orthodontics, and is combining the final part of his specialist orthodontic training with a PhD. His research is focused within the field of three-dimensional facial imaging — in particular the assessment of facial movement.

In 2009, Hashmat won the Geoffrey Fletcher Scholarship awarded by the British Orthodontic Society, which allowed him to visit the Texas Medical Centre in Houston, USA, to look at three-dimensional techniques used in the planning of jaw surgery. His clinical work is split between the School and Morriston Hospital in Swansea which is the centre for the South Wales Cleft Service.

"My working week has a good balance of clinical, research and teaching components," says Hasmat. "I hope to identify whether impairments in facial movement exist in patients requiring jaw surgery and, if so, whether they are normalised afterwards."

Dr Shelagh Thompson LEARNING & SCHOLARSHIP

Dr Shelagh Thompson is a Clinical Senior Lecturer and Honorary Consultant in Sedation and Special Care Dentistry.

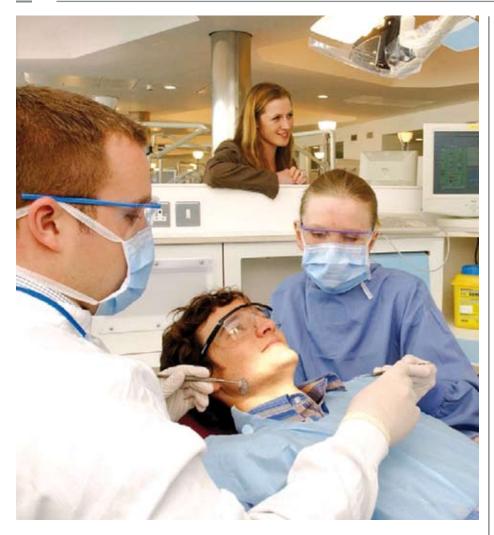
As chair of the Teachers Group of the British Society for Disability and Oral Health and a member of its Specialist Advisory Committee, she was involved in developing the new specialty of Special Care Dentistry. Dr Thompson is also Programme Director of the School's MSc in Conscious Sedation.

"My ongoing aim is to educate dental teams to provide holistic care to people with disabilities and anxieties," says Shelagh. "I'm also looking to continue the development of the Specialist Registrar Training in Special Care Dentistry,



leading to increased research and improvements in clinical practice throughout Wales."

The first cohort of students from the MSc in Conscious Sedation will graduate in 2010/11.



Electronic dental record system to be rolled-out in hospital

Staff and students at the University Dental Hospital to reap rewards of automated, advanced patient record system

Clinical facilities throughout the University Dental Hospital are to be boosted by the introduction of a chair-side electronic dental record system to the clinics.

The system, designed specifically for dental schools, will provide a comprehensive electronic dental record with integrated educational, research and administrative modules.

Benefits of the system will include immediate access to patient records, enabling the clinician to view the full dental history of the patient without the need to request and track a paper file, and will also allow an individual record to be created for each student showing their assigned patients, treatments carried out and a record of grades and competencies – all resulting in less paperwork for students and staff. In

addition the system can be manipulated for research purposes, with data gained feeding into the improvement of patient services.

The project will be led by Andrea Aquilina, Directorate Manager of the University Dental Hospital, and Jon Synott from Two Ten Health, the providers of the system.

Benefits of the system will include immediate access to patient records and less paperwork"

Major clinic refurbishment

As part of a rolling programme of refurbishment throughout the University Dental Hospital, the Oral Health Clinic will be fully refurbished during summer 2010, ahead of the 2010/11 academic session.

The clinic, which contains 34 dental chairs, will be completely modernised, including the installation of a suite of ambidextrous units, two radiography units for ease of access and enhanced decontamination facilities.

The refurbishment will be completed ahead of students returning to the clinic in October.

Primary Care Dental Unit for Cynon Valley

Work has begun on a new Primary Dental Care Unit at Mountain Ash in the Cynon Valley. The Unit will provide realistic clinical experience for students from the Cardiff School of Dentistry and boost healthcare resources in the area.

An 18-chair facility is being established which will provide access by appointment to daytime dental care for an estimated 10,000 people. All treatment at the facility will be undertaken by senior students from the School of Dentistry, helping to meet the dental workforce needs of Wales by improving the educational experience of undergraduate students, and encouraging dental professionals to settle in the area.

The Cynon Valley is among the most socially deprived areas in Wales, according to the Welsh Index for Multiple Deprivation. Of particular concern is the dental health of children in the area, always a barometer for both current and future needs.

A comparable unit at St. David's Hospital in Cardiff, has been running for over eight years and has proved very successful in meeting educational and healthcare needs. The new facility is scheduled to open in 2011.



A new understanding of oral health trends emerges

The recent Emerging Trends Symposium organised by Philips Oral Healthcare brought together the latest thinking in oral health and presented new perspectives which could be applied to future academic research and clinical practice

r Fridus van der Weijden,
Academic Centre for
Dentistry Amsterdam,
the Netherlands, gave
a presentation about
"Interdental cleaning:
when and how much?"
and showed the results of four systematic

and showed the results of four systematic reviews concerning the effectiveness

of dental floss, woodsticks, interdental brushes and oral irrigators concluding that interdental brushes provide the best interdental cleaning.

Professor Dr Wim Teughels, University of Leuven, Belgium talked about "Probioitics in establishing a healthy microbiota" and explained plaque-related periodontal diseases



are thought to develop when a person's host immune system is overruled by the specific periodonto-pathogens. Historically, research has focused on this and disregarded the presence of a wide variety of commensal, albeit beneficial, bacteria. Oral probiotic therapy would seem to have enormous potential for the treatment and prevention of periodontal diseases and caries.

Not quite so palatable were revelations from Professor Iain Chapple of the University of Birmingham School of Dentistry, Birmingham, UK whose presentation "How does diet affect inflammation?" highlighted statistics showing an alarming rise in obesity worldwide. He then demonstrated the association between hyperglycaemia or hyperlipidaemia and periodontal inflammation which has fueled a reemergence of interest in the role of dietary micronutrients and periodontitis.

Dr Steven Offenbacher of the University of North Carolina, USA presented the "Biological phenotypes of gingival diseases" in which he reported that all changes in clinical signs and mediators affected during research rebounded to baseline in response to treatment at the end of the study using a Sonicare toothbrush.

Dr Cheryl Butz, who has three paediatric practices talked about "How to establish oral care behaviours in children", explained that children need to be treated differently from adult patients and this presents those who treat them with a number of challenges but an even greater opportunity of successfully influencing future oral health. It is important for dental professionals to know what effective means are available for influencing patients and how to implement these positive features in a practical, practice-oriented system of care.

Dr Marko de Jager, Director of Scientific Affairs, Philips Oral Healthcare presented the latest addition to the Sonicare portfolio; the Sonicare For Kids and described the lengths to which the company went to create a dedicated powered toothbrush for children, including market insights with consumers and dental professionals and clinical substantiation. He also outlined studies conducted by experts in child in the development and ergonomics. Their work helped to shape the product to make sure that the way it is used, held and interacted with, is as effective and enticing as possible for a child.

More information about Philips Oral Healthcare and the Sonicare portfolio can be found at www.sonicare.co.uk/dp

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A practical programme

James Ban is a fifth-year student on the Bachelor of Dental Surgery (BDS) programme. Born and raised in Cardiff, he was President of the Dental Student Society in 2008/09

What made you choose to study in Cardiff?
The city itself was a big attraction,
especially as it's my home town. It has all
the amenities you would expect from a
capital city, but is small enough for you to
be in easy reach of everything. The student
atmosphere is also fantastic.

Why dentistry?

I like the practicality of dentistry, and that you are very much 'hands on' throughout the course. My father is a dental technician, and, as a teenager, I did some work experience in dental practices, helping as a dental nurse. Several of my father's colleagues recommended the Cardiff School to me, and when I visited here on an open day it was by far the friendliest place I had visited. The teaching also appeared to

Did you experience any challenges adjusting to life as an undergraduate?

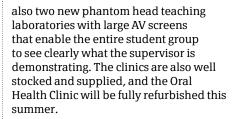
Not really, although the leap from A-levels was a bit of a surprise in terms of the workload. Doing dissection in year one was very enjoyable, and a big attraction of the early parts of the course for me and many other students. Socially, I lived in the halls of residence at Talybont in my first year which was excellent.

How safe do you feel in Cardiff?

Very safe, particularly in the student areas. Like anywhere though, it's just a case of being sensible in terms of where you go and what you do.

How would you rate the School's facilities?

Highly. There are two new lecture theatres within the building, and



Has the course fulfilled your expectations?
Definitely. As soon as I treated my first patient I knew I had made the right decision. The course is practical, makes you think, and improves your decision-making skills. I think it makes you a more rounded dentist compared to some overseas schools.

You were President of the Dental Student Society in 2008/09. How was that experience?

It was really enjoyable. The highlight of my year was organising the Dental Ball at the Millennium Stadium for 300 people. We managed to raise £2,000 for Face-Up Cymru, a charity in Cardiff that supports patients with oral-facial cancer.

What has been your favourite aspect of the course? Working at the Primary Care Dental Unit at St David's Hospital in Cardiff. This is great preparation for your VT year. You are treated more like a qualified dentist, and it replicates a real working day.

I also recently went on a student exchange to the dental school in Alabama in the USA, which was great and really highlighted the differences between public and private dentistry.

The course is practical and improves your decision-making skills"

What are your ambitions after finishing the course?

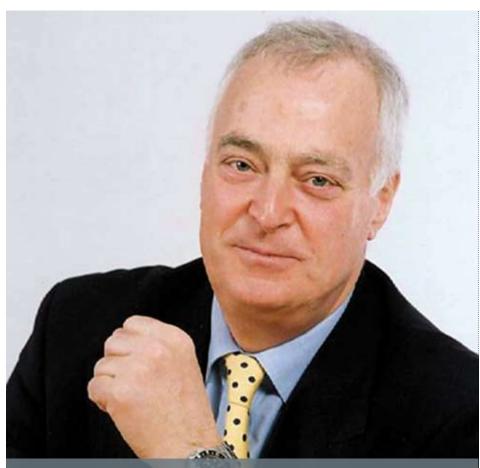
Once I've completed my DF1 year I want to either work in practice in Australia for a year, or undertake a postgraduate course, possibly in Endodontics or Prosthodontics. Eventually I want to return to Cardiff though, go into practice, and, hopefully, look to work part time back in the School.

Would you recommend the School to others?
Yes, and I have to quite a few, including my sister who is currently choosing her A-levels!

What advice would you give new students coming to the School?

I think being organised is the key and not leaving anything to the last minute. Finally, five years may seem like a long time and hard at times, but the years really do fly by and it will all be worth it on the day of graduation.





An officer and a gentleman

Cardiff alumnus, Paul Langmaid, advises the Welsh Assembly Government on dental issues. Students must ensure that patients' needs always come first, he says

What attracted you to study dentistry at Cardiff School of Dentistry?

Despite my father being a consultant neuro-surgeon in Morriston Hospital in Swansea and then Cardiff, I had always been drawn towards studying dentistry. I knew several people who taught at the Cardiff School of Dentistry, and several peers planning to go and study there. As Cardiff is also my home town, it was quite a straightforward decision. I will always be grateful to Professor John Miller for giving me the opportunity to study at the School.

What is your favourite memory from your time in Cardiff?

The general atmosphere, and meeting people from a wide range of backgrounds – social, cultural and political. Once in the Dental Hospital, I enjoyed most oral surgery as you really felt you were improving people's health and making a difference. I was lucky enough to have some influential teachers such as David Adams, David Whittaker, Eric Nash, Neil Swallow, Russell Hopkins, David Edmunds and last, but by no means least, Mr Eric Lewis, a consummate professional in the art of Prosthetic dentistry, especially full dentures!

Paul Langmaid is the Chief Dental Officer for Wales. A Cardiff alumnus, he graduated from the School's Bachelor of Dental Surgery course in 1975. After working in his own practice, in 1986 Paul was appointed Senior Dental Officer on the island of Anguila, responsible for providing, with two dental therapists, dental services to a population of 8,500 inhabitants. He returned to the UK in the early 1990s to work in practice in Cardiff and in the NHS Community Dental Service and the Oral Surgery Department of Mid-Glamorgan Health Authority. He was appointed Senior Dental Officer in the Welsh Office in 1993. In 1997, he became Chief Dental Officer for Wales.

Paul provides independent professional dental advice to the First Minister of the Welsh Assembly Government, and other ministers and policy makers.

I'm proud of the fact that I've helped select and support good people to fill key posts in Wales and elsewhere

What was the most important thing you learned during your time in the School?

Professor Miller taught ethics and told us in no uncertain terms that we weren't just studying for a degree, but entry into a learned profession. Having a dental degree almost guaranteed a job, but professional requirements and responsibility came with it

As the Chief Dental Officer for Wales do you have a typical day?

There isn't really such a thing as a typical day. I spend a considerable amount of time at meetings and events out of the office around the UK, on anything from the GDC Fitness to Practice Policy Commitees to the Wales evidence to the Doctor/ Dentist Pay Review Body Report. I prefer face-to-face meetings to working via telephone or email. The personal relationships you establish with colleagues are essential. Although you can't quantitatively measure their value, you certainly know when you don't have them.

What is the proudest achievement in your career so far?

I felt I made a real difference in Anguila, securing funding to re-equip the dental practice out there, and making substantial changes to dental care, including getting more teeth in contact with fluoride. In my current job, I'm proud of the fact that I've helped select and support good people to fill key posts in Wales and elsewhere.

What advice would you give a student thinking of studying in Cardiff?

Come! Cardiff is a vibrant city which has been transformed in the last decade or so. The University is also growing rapidly, and its research reputation is helping to attract high-quality staff. Not least, the School itself has grown considerably, and is a modern, well-equipped learning environment.

What advice would you give those students due to graduate this summer?

Take full advantage of all the opportunities that present themselves to you, not least those students who are undertaking their Vocational Dental Training in Wales. The scheme is very well run, and participants are very well looked after. If you go on to build your own practice, base it upon patient needs rather than your own and your chances of success will be much greater.

School alumnus supports MScD course

Dr Clement Chan, a graduate of the School's MScD in Orthodontics, to sponsor postgraduate student

Generous support from an alumnus of the School will provide a talented student with the opportunity to pursue a postgraduate education in Cardiff.

Dr Clement Chan, a graduate of the School's three-year MScD in Orthodontics, will support the tuition fees of a Home/EU student to undertake the same course from October 2010 on the Clement Chan Scholarship.

Dr Chan explain: "I had an immensely enjoyable experience at the Cardiff School of Dentistry and received excellent support on the Orthodontics course. I wanted to give something back to the School and felt that supporting the next generation of students was the best way of doing so."



CALLING ALL CARDIFF ALUMNI

The School is keen to maintain strong links with its alumni, and would welcome contributions to

wisdom or to any of the other activities in which the School is involved. If you would like to get in touch,

please contact us at wisdom@cardiff. ac.uk or via the contact details at www.cardiff. ac.uk/dentl.





of MSc programmes in Cardiff. He has served as President of the British Society of Oral Medicine, member of the Advisory Council for the Misuse of Drugs at the Home Office and member of the Scientific Advisory Committee for Antimicrobial Resistance and Hospital Acquired Infection at the Department of Health. Professor Lewis is well known to many dental professionals throughout Wales as a result of his extensive postgraduate activity. He has served as the Hospital Tutor for the inaugural Dental General Professional Training Scheme in Wales since 1997 and over the past two years has provided core CPD in Infection Control to approximately 2,000 Dental Healthcare Professionals in Wales. Professor Lewis maintains an active research programme in microbiology and therapeutics and was instrumental in establishing the Clinical Trial Unit in the Dental Hospital and School. In addition, he has written a number of popular text books on the subject of Oral Medicine.

"Throughout the 18 years that I have worked in Cardiff I have witnessed the School go from strength to strength, to become one of the top dental institutions in the UK. It is an honour to be given the opportunity to lead the School in the future and to, what I hope will be, further academic achievement and success," says Professor Lewis.

Professor Lewis has developed strong postgraduate links in the Middle East

The Cardiff School of Dentistry is proud to introduce Professor Mike Lewis as its next Dean. *wisdom* highlights his career to date



rofessor Mike Lewis, appointed as the Dean of the School of Dentistry from 1 August 2010, has a Welsh heritage and dental background. His grandfather was a general dental practitioner in Church Village, where Professor Lewis' father

was brought up, and his mother is from Aberdare.

On completion of his schooling in England, Professor Lewis went to Dundee University in 1975 to study dentistry. After qualifying from the Bachelor in Dental Surgery programme in 1979, he completed House Officer and Senior House Officer posts in Oral Surgery, Conservation and Periodontology at Dundee Dental Hospital. Professor Lewis then spent two years as Registrar in Oral Surgery at Dundee Royal Infirmary. In 1983, he took up a research post in Oral Surgery at the University of Glasgow and gained his microbiology-based PhD in 1987. Professor Lewis was then appointed as a Lecturer at Glasgow University, during which time he completed his specialist training in Oral Medicine.

In 1992, Professor Lewis returned to Wales to take up a Lectureship in Oral Medicine in Cardiff and was subsequently promoted first to Senior Lectureship and then Reader, gaining a personal Chair in 2000. During the past three years he has served as Dean of the Dental Faculty at the Royal College of Physicians and Surgeons of Glasgow and is presently Chair of the Joint Meeting of Dental Faculties. Professor Lewis has developed strong postgraduate links in the Middle East, which has helped with the development



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