Welcome to the second issue of Dental Mirror. The first issue proved very popular and has been circulated both in hard copy and electronically to a wide audience both in Scotland and the wider UK. Alumni have welcomed the opportunity to catch up on their alma mater and wish to continue to be on the mailing list. We are very grateful for the constructive comments after the first issue and we would welcome further suggestions at any time.

Dental Mirror will continue with existing themes relating to Research, Education, Staff News, Student items, and Personal Reflection. In this issue we have also chosen to update you on the ongoing refurbishment of the building, the new initiatives in student outreach facilities and experience, dental foundation training, and dental therapist training.

Modernising Dental Careers
The changing Face of Postgraduate Dental Education

Dental Foundation Training
In February 2003 the Scottish Executive Health Department, along with other UK Health Departments, published a policy statement on Modernising Medical Careers, which was followed by a further publication “Modernising Medical Careers – The Next Steps”. These reports advocated the introduction of two years of structured postgraduate medical training for all medical graduates, to be known as Foundation Training. The Department of Health has also now signalled its intent to move to a 2 year “Foundation Programme” for all dental graduates which is effectively a massive expansion of General Professional Training. The term “GPT” will now be phased out in Scotland and from August 2007, all graduates enrolled in a 2 year programme will be known as Dental Foundation trainees (DF1 or DF2).

Most graduates will still spend their first year in Vocational Training, but 12 are enrolled into a 2 year longitudinal programme in the South East of Scotland and 8 will be enrolled as DF1 trainees in the Hospital Dental Service (4 of those are in Glasgow). The options for DF2 are many and varied, both geographically and in terms of service location. Combinations of Hospital Service and Salaried Service exist throughout the country and posts are available in a number of District General Hospitals as well as Dental Hospitals. Whilst this range of options makes the recruitment to these posts very complex, offering a wide range of choice to graduates is undoubtedly one of the main attractions of undertaking structured postgraduate training in Scotland.

There is work still to be completed on identifying sufficient 2nd year places to make DF training available to all – some of these posts will come from existing Dental SHO posts and this will inevitably have some impact on service. We are used to a mixed cohort of training grade staff in terms of experience, with GPT’s being supported by a relatively large contingent of more experienced SHO’s. In the future, whilst WTE numbers will be the same, the balance will be more towards the DF trainees, with a

Continued on page 2
much smaller number of SHO-type posts, maybe called Consolidation posts, or DF3. The overall level of experience within the training grade cohort, therefore, is likely to be reduced, requiring a different clinical case mix, and probably a greater level of supervision.

Quality Assurance in Recruitment
A further area in which NES has invested heavily is recruitment. The days of securing a post after a cosy chat with the local senior staff are well and truly in the past! Over the last 3-4 years recruitment to Dental Foundation and Dental Hospital SHO posts has been a progressively more co-ordinated exercise. A single advert is placed in the BDJ for all the Scottish posts and all the paperwork relating to the recruitment process is available from the NES website. A detailed application form is required, and those who make it through the short-listing process are interviewed by a panel with representatives from all the regions. Clinical skills testing and a review of the educational portfolio also forms part of the selection process. Candidates rank their preferences for particular posts and these are cross-matched after the interviews are completed. The higher a candidate is ranked, the more likely they are to get their first choice of post.

Glasgow Dental Hospital continues to be ranked very highly, and we have therefore been in a position to recruit a very high standard of candidate to this institution—long may that continue! This August will see the biggest ever intake of training grade staff to GDH – all the SHO’s and DF’s in August will be new, although there is the probability that some will be staff who have reapplied and been reappointed. All those recruited are now offered one year contracts, and any who wish to stay longer are required to go back through the selection process. In the West of Scotland we also ran a very successful centralised recruitment to all the OMFS SHO posts. This will be expanded this year to include posts in St Johns, Livingstone and possibly Aberdeen Royal Infirmary.

The Electronic Portfolio
To help with the monitoring and assessment of these trainees, it is our intention to introduce an electronic portfolio to replace the current paper-based Record of Progress and Achievement. We are well on the way to producing a mock-up of the portfolio which has been developed from one piloted in VT and the Core Medical Programme portfolio. The introduction of this is pencilled in for August this year, and the advantages would be significant. Currently trainees start a new portfolio at each stage of their career, and usage is patchy throughout the country. Monitoring progress towards educational goals is time-consuming and dependent on a lot of trainer-trainee cooperation. A single web-based e-porfolio which transferred with the trainee from post to post would be a significant step forwards.

Alyson Wray, Hospital Postgraduate Tutor

The School for Dental Care Professionals
Those of us that have worked in Glasgow Dental Hospital and School for some years will have known this department under a few different names – School of Hygiene, School for Dental Auxiliaries and School for Professionals Complementary to Dentistry. We became the DCP School in Summer 2006 at the same time as registration came into being for all groups of Dental Care Professionals. The name is not the only new thing; there are also new educational opportunities for students within the School which makes for interesting times.

We train Dental Nurses in a 2 year course leading to the Glasgow Dental Hospital Certificate in Dental Nursing which is a recognised path to registration by the GDC. The trainees also sit the National Certificate in Dental Nursing set by the Dental Nurse Examination Board and over the last few years we have had several Nurses being awarded Passes with Merit or Distinction. The Nurses work in all the departments and are a necessary part of the nursing team within the Dental Hospital. I am grateful for the clinical training they receive in each department from all the qualified nurses and team leaders. With the formation of the Oral Health Directorate thought has gone into how training
of dental nurses in all clinical areas could be implemented, resulting in nurses having clinical training in the hospital, community and practice settings and thus widening their experience. This is still very much at the planning stage but we will keep you informed about progress.

The integrated Diploma in Dental Hygiene/Dental Therapy started in October 2003 with the first cohort of students qualifying in December 2005. After a 6 month delay in starting the next course we moved to an annual intake commencing in March each year. I can hardly believe that we have just started Course 4. The first course was not without difficulty but all students were successful and it was gratifying to hear from all the VT trainers how impressed they were about their professionalism and clinical ability. I have to record my thanks to a dedicated team of tutoring staff who have worked very hard to produce a course we can take pride in. We have also had a huge input from the Academic staff who have helped in integration of training with that of the undergraduates. This can only help when they all qualify and work together as part of a team. The students on qualification are both hygienists and therapists so obviously the course is now quite different. One of the downsides for the hospital is that we are unable to see the same numbers of patients for Oral Hygiene and Preventive treatment, as the students also need to carry out restorative treatment for children and adults.

The next aim is to seek approval to convert this course into a degree course, possibly a BSc in Oral Health Science. At present the Diploma is awarded by the Royal College of Surgeons of Edinburgh but many Hygiene/Therapy courses are already degree courses including the one running in Dundee. I think this would seem to be the way forward for both groups of students and would also benefit the DCP Staff. I hope to give you some information on the progress of this in a future issue.

Susan Winning, Director

Staff News
In this second issue of Dental Mirror we wish to introduce new staff members who have been appointed within the NHS. This follows on from the first issue where we introduced University members. In following issues we will introduce new members appointed within both groups working in the Hospital and School.

New NHS Members of Staff

| Dental Nurses:                  | Dorothy Anderson, Rachel Butler, Jonie Irvine, Fiona Logie, Natalie McCann, Kirsty McInally, Natalie Steele, Margaret Tucker, Catriona Walker |
| Secretaries:                   | Elizabeth Cavan, Carol McBain, Sandra Skinner |
| Staff Hygienist:               | Stacey McGill |
| Dental Technicians:            | Stuart Arbuckle, Klaudiusz Kozubek, Michael Spence (Trainee) |
| Estates:                       | Jake Kaneen |
| Superintendent Radiographer:   | Liz Weldon |

We would also like to welcome the following staff who have relocated to the building from Argyll and Clyde and Dalian House

| PA:                           | Caroline Dawson, Gillian Milroy |
| Interim Clinical Director:    | Alan Gerrish |
| Senior Health Promotion Officer: | Joy Farquharson |
| Consultant in Dental Public Health: | David McCall |
| Programme Manager of the Scottish Executive’s Children’s Oral Health Demonstration Programme, “Childsmile West”: | Lynn Brewster |
**Congratulations**

To Dr Gordon Ramage on his ‘Innovation in Oral Care Award’ from IADR and GlaxoSmithKline for his study on ‘Improving Oral Care Using Tea Tree Oil and Its Derivatives’. His hypothesis-driven study will provide evidence that derivative components of tea-tree oil exhibit both antifungal and anti-inflammatory characteristics, which can be used as the foundation in the development of mouthwash and denture cleanser.

To Dr Andrew Crothers on his promotion to Senior Clinical University Teacher in Restorative Dentistry.

To Siobhan McHugh who commences in June at the University of Plymouth as a Lecturer in Health Statistics in the School of Mathematics and Statistics. Siobhan has worked as Research Statistician with us since 1999.

**Research Matters**

Within the Dental School we have three main research sections. We will update readers of the progress of one these groups in each issue of Dental Mirror. In this edition the focus is on the work undertaken within the Community Oral Health Section.

**COH – Community Oral Health Research Section**

The Community Oral Health Section conducts research related to Dental Public Health (Dr Viv Binnie, Mrs Yvonne Blair, Mr David Conway, Professor Lorna Macpherson), Paediatric Dentistry (Dr Marie Therese Hosey and Professor Richard Welbury) and Special Care Dentistry (Dr M Petrina Sweeney). The major research themes are shown below.

**Oral Cancer Epidemiology**

We are investigating the epidemiology of oral cancer in Scotland, UK, Europe, and globally with a particular focus on the impact of socioeconomic circumstances and inequalities. Descriptive epidemiology of the UK Cancer Registries has been used to assess the burden of incidence in relation to area-deprivation. Analytical work includes collaboration on the WHO International Agency for Research on Cancer (IARC) Alcohol Related Cancers and Genetic susceptibility in Europe (ARCAGE) study which is a 12 centre case-control study and we are leading on the socioeconomic factors across Europe. In addition we are also part of the International Head and Neck Cancer Epidemiology (INHANCE) group and are working on a worldwide systematic review on the risk of oral cancer associated with low socioeconomic circumstances. On prevention – we have been involved in the delivery and evaluation of the West of Scotland Cancer Awareness Programme; and on treatment – we are a partner in the Cochrane Review of Interventions for the treatment of oral cancer.

**Oral Health Improvement**

Members of the Dental Public Health Unit have a major involvement in developing effective community-based intervention programmes to improve dental health in pre-5-year-olds. Initial worked focussed on Greater Glasgow and was later extended to Scotland-wide initiatives detailed in the Scottish Executive’s “An Action Plan for Improving Oral Health and Modernising NHS Dental Services”. The evidence of health gains following implementation of our strategy in pilot districts led to the introduction of Oral Health Action Teams (OHATs) throughout the NHS Board area.

We continue to develop and evaluate NHS service improvement models, including the Childsmile West Demonstration Programme, funded by a Programme Grant from the Scottish Executive. This latter work is carried out in collaboration with colleagues from the University of St Andrews, The Dental Health Services Research Unit, University of Dundee, the Robertson Centre for Biostatistics and University College London. We are also undertaking modelling of statistical methodologies, drawn from the fields of Epidemiology, Social Science and Economics, to inform dental inequalities measurement in Scotland and further afield.
On-going partnership has been developed with the Community Dentistry Department, Halmstad, Sweden, and with the Department of Psychology, University of Glasgow to take forward a number of studies in both water-fluoridated and non-fluoridated communities to assess the aesthetic impact of dental fluorosis. This work has contributed to the development and evaluation of the Scottish Executive’s community toothpaste delivery and nursery/school toothbrushing initiatives.

We have worked with staff of Glasgow Dental Hospital and School in carrying out two smoking cessation trials, the first in the Dept of Periodontology, where the staff hygienists gave ‘brief’ advice on quitting and nicotine replacement therapy, to a cohort of their patients. The second trial involved patients with potentially malignant lesions who were referred to the Department of Oral Medicine for treatment. Here the advice was given by a dedicated research nurse. Both the trials used biochemical verification, namely carbon monoxide in exhaled air, and levels of cotinine (a nicotine metabolite) in saliva, to determine whether participants had quit smoking or reduced.

**Paediatric Dentistry**

Paediatric Dentistry within the COH section has centred its research efforts on the effect of general anaesthesia on cognitive function in collaboration with:-

- Professor Keith Millar (*Psychological Medicine*)
- Professor Adrian Bowman (*Statistics*)
- Drs John Asbury and Neil Morton (*Anaesthetics*)
- Toni Musiello (*Psychology, Research Assistant*).

Two grants have been awarded from the Chief Scientist’s Office which was reported in the last issue of Dental Mirror. The first enabled a study looking at children who had undergone a short general anaesthetic with resultant papers submitted and published to specialist journals in anaesthesia.

The second grant has enabled a study which has just started, that will look at cognitive function after longer intubation anaesthesia. These are innovative studies in this field where there is no previous literature and will enable us to give realistic post-operative advice on how long it will take a child to recuperate after GA and therefore how long they should be off school.

**Adult Special Care Dentistry**

Research in this area has concentrated on three main themes, namely the elderly, those receiving palliative care and adults with intellectual disability. A national study looked at the provision of domiciliary dental care by Scottish dentists, investigating the level and delivery of care and the barriers to its provision in the NHS in Scotland. The oral health care and status of elderly care home residents in Glasgow has been investigated in a two-phase study involving interviews with care home staff and oral examinations of consenting residents.

Studies to determine key characteristics to allow prediction of those at highest risk of post-stroke pneumonia have been conducted. Clinical data were collected from over 1000 people participating in the UK Special Olympics held in Glasgow in 2005. On-going research relates to the prevention and management of oral fungal infections in those receiving palliative care for a cancer diagnosis and to oral health risk assessment for adults with intellectual disability.

Dental school staff involved in these projects also include:-

- Stephen Turner (*Senior Researcher*)
- Catherine Kennedy (*Research Nurse*)
- Margaret Jackson (*Chief Biomedical Scientist*)
- Gordon Ramage (*Senior Lecturer in Microbiology*)
- and Jeremy Bagg (*Professor of Oral Microbiology*).

Lorna MacPherson, Head of COH Section
**Staff Publications - 2006**


Education Matters

OUTREACH EXPERIENCE IN BDS 5

The First Five Years (2002) informs that the General Dental Council “expects Dental Schools to assist students to prepare adequately for the transition to independent and unsupervised practice which is permitted on primary qualification” recognising that “an extended clinical environment and outreach teaching can potentially broaden the base of available clinical material and enhance the educational experience”. This driver has in part been responsible for the recent advancement of a teaching concept in Dentistry which is not that new and which has, in fact, been used in Medicine for a considerable time.

From September 2008, when the first Glasgow dental students following the 2004 Curriculum enter BDS 5, they are going to experience an innovative and much extended Outreach Programme which has been developed in partnership with NES and the Salaried Primary Care Dental Service in Scotland.

In this exciting venture, it is anticipated that students in final year will spend 16 weeks each working in dental centres around West and Central Scotland, some of which are currently under construction. Most core teaching activity will be finished by the end of BDS 4, when the current group of students will complete their written Final Examination. BDS 5 students will be out of the Dental Hospital for just under half of the academic year. The remainder of their time will be spent completing in-house activity and special modules designed to extend opportunities in particular areas of interest.

During their time in outreach, students will have the chance to apply their acquired knowledge and skill, working under the supervision of specially appointed teachers in a primary care environment. They will be allocated to one centre in the central belt for 12 of the 16 weeks and will gain remote and rural working experience in two separate fortnight blocks in picturesque Dumfries and Stornoway. Apart from the educational component, students can benefit from living and working in two disparate communities in contrasting scenic regions of Scotland. The proposed local centres include a majority of sites within the Greater Glasgow and Clyde Health Board area, with the others in Ayrshire and Arran (Kilmarnock), Forth Valley (Langlees) and Lanarkshire (Coatbridge), enabling ease of commuting and some degree of continuity of care.

Most of the available literature broadly supports the theory that student outreach teaching provides a range of beneficial learning experiences which can be supplementary to those achieved in the Dental Hospital environment, including better time management, four-handed working, improved confidence and speed, exposure to a realistic patient base and a more holistic view of health care. It can also bring benefits to the other stakeholders, offering research opportunities for the Dental School, academic support for NHS partners and improved local access to dental care for patients.

Associated with any new development, questions inevitably arise over integration with existing teaching policy, quality assurance and seamless transition for students, whose academic and pastoral requirements remain the Dental School priority. Because several agencies are involved and have invested heavily in setting up this project however, the certainty of close multi-sectoral scrutiny through intensive audit is reassuring.

If anyone would like further information, they should contact:-
Frank Bonner, Outreach Teaching Administrator, or me, on ext 89625
E-mail: f.bonner@dental.gla.ac.uk or d.watson@dental.gla.ac.uk

David J. Watson, Senior Clinical University Teacher, Outreach
In February of this year we saw the annual British Dental Students’ Association Conference come to Glasgow for the first time in almost 30 years. 200 delegates representing students from across the UK were in attendance at the event, which included a meaty academic component complemented by a packed social programme.

The speakers covered a varied selection of subjects including forensics, contemporary endodontics, maxillofacial surgery, child abuse, body snatching pre 1820’s and implantology. We were also grateful for an appearance from Mr Peter Ward, chairman of the BDA, speaking about Dentistry in the media. These were all well received, and surprisingly well attended given the antics of the evening social events prior to each day’s talks!

We were graciously provided a civic reception in the Hunterian Art Gallery to kick off the social programme, with drinks and a formal welcome to the city for the delegates. Next we were off to a fancy dress ball in Oran Mor, where an intriguing mix of cavemen, goths, pirates and a variety of other colourful characters paraded the dance floor until the wee hours of the morning. The following night saw a tour of the Glengoyne whiskey distillery, followed by the first ever BDSA highland games in the student union - guest starring our very own highland cow, may he rest in pieces. The social programme concluded on the Saturday night with the Masquerade Ceilidh in Bute Hall. The venue provided a stunning backdrop to the meal, followed by some first-class entertainment, which brought an appropriately spectacular close to the festivities.

Reports from delegates suggested a great time was had by all, and we would like to extend our thanks to the organising committee for all their hard efforts. There has been very good coverage in the dental press and positive feedback from many dental schools and companies. Next year the conference moves to Birmingham, we hope plenty of you head down and support them to make it every bit as successful as our own!

The organising committee for the 2007 BDSA annual conference.
Common Room
Over the last few months several areas of Glasgow Dental Hospital have been undergoing refurbishment, with the student common room being one such area. It is exciting that the common room will soon be finished as it has been in need of upgrading for many years now. When complete the room will be hardly recognisable, as nearly every aspect has been improved. New lights, flooring, colour scheme, furniture and a breakfast bar have all been provided thanks to the support of the NHS and University. Dr Crighton has also kindly donated a TV to our cause and a generous donation from the MDDUS means a new pool table has been ordered.

Looking to the future, the improved common room will provide the ideal setting for social functions between staff and students; with the new normal size pool table speeding up games — hopefully!

I would like to take this opportunity on behalf of the students to thank Prof. Bagg, Mrs. Millard, Mr Broad, Mr Gordon, Mr Regan and Mr McGarry without whom the upgrades would not have been possible.

Thomas Lamont, 4th Year
Common Room Convenor, Glasgow Dental Students Society

Refurbishment update
Dental Decontamination Unit Opening

February saw the opening on Floor 2 of the new Dental Decontamination Unit – the culmination of four years’ hard work in designing, building and testing the facility. This £1.6 million project has provided the Dental Hospital and School with a state of the art facility that meets all of the technical requirements of the Glennie Committee.

Two new sterilizers and five new washer disinfectors were installed in a suite of purpose built rooms that provided the required segregation of washing and packing procedures and also met all the necessary environmental conditions and controls. The installation of the equipment was not without its challenges. We had the option to close Sauchiehall St and crane the equipment in though a window in the Prosthodontics clinic or dig a hole in the car park and lower the equipment into the

The Bute Hall Ceilidh on the Saturday, dancing to music provided by Kilter.

Simon Kidd, 5th year
Treasurer, Glasgow Dental Students Society
boiler house. The photograph shows we chose the latter option! Installation of the equipment was followed by an intensive period of testing of the equipment and processes to ensure that they can successfully decontaminate and sterilize dental instruments.

Along with the new equipment and facilities, there has been a major investment in computer tracking and quality control systems. All trays are logged into the department and tracked through every stage of the process ensuring that all decontaminated/sterilized trays can be traced back to specific validated processes. Part of this process involves tagging instruments / trays with unique identifiers (a bar coded metal tag) that will allow these to be tracked. The quality system is an important part of the new facility and covers all aspects of testing the environment and equipment, compliance with written procedures and complaints. It is regularly audited both internally and by external bodies. This provides the basis for accreditation of the unit and is equally important for developing the services provided.

The opening of this unit has provided the Hospital & School with an important new facility and I would like to take this opportunity to thank the unit’s staff and the many people who contributed to making this happen.

All in a day’s work, sterilisation equipment from the car park dropping into level two.

Ronnie Strang, Clinical Service Manager

**Personal Reflection**

**Quality Improvement, Boston and the Red Sox**

I was very honoured to be selected as the first Scot and the first dentist to get the opportunity to travel to the US as a Health Foundation Quality Improvement Fellow. I think I ticked enough minority boxes for them to pick me above others. I didn’t really know what to expect and it remains difficult to describe succinctly.

Quality Improvement Fellowships are funded by the Health Foundation (www.health.org.uk) and aim to develop a group of senior leaders with the enthusiasm, experience and skills to promote quality improvement nationally and build institutional capability and performance in quality improvement.
The Health foundation supports three Quality Improvement Fellows each year. They have teamed up with The Institute for Healthcare Improvement (IHI) in Boston USA to offer a fellowship year in Boston based at IHI (www.ihi.org) and at the Harvard School of Public Health.

The first seven weeks were spent at the Harvard School of Public Health starting a Masters in Public Health which I finished in the second summer before flying home. It was very hard work but fascinating. The highlight was Society and Health taught by Professor Ichiro Kawachi, a world expert on the social determinants of health. He even used dental examples.

The bulk of my time was spent working with IHI and learning from them. There were six fellows in total from the UK and the US. We worked and learned well as a group and were able to meet many world experts in their fields. I was able to travel around the US to visit healthcare institutions ranging from Seattle Children’s Hospital to the Korean Healthcare Institute in downtown Los Angeles. The focus was on trying to understand how to create a ‘better’ healthcare system in both the developed and the developing world. We learned new techniques for achieving change; we studied leadership styles and watched experts improve care with no increased resource.

One of the highlights was the privilege to be involved in IHI’s 100,000 lives campaign. This was a US wide initiative to save 100,000 unnecessary deaths in US hospitals in eighteen months using six evidence-based interventions. In June 2006 it was announced that the hospitals in the campaign had prevented 122,000 deaths.

Clearly it wasn’t all work; I became a baseball fan and now support the Boston Red Sox and anybody playing the New York Yankees. It was a life-changing opportunity and I am very grateful to the Health Foundation for the funding and the leadership of the Dental School for allowing me the time away from Glasgow.

Jason Leitch