THE STORY BEGAN IN 2009 WHEN ROBERT LATIMER, A FINANCIAL PLANNER AND CO-OWNER OF THE 53-FOOT STEEL YACHT CHIMERE, ESTABLISHED MEDICAL SAILING MINISTRIES (MSM) TO TRANSPORT MEDICAL VOLUNTEERS, PLUS THEIR GEAR, SUPPLIES AND EQUIPMENT, TO REMOTE ISLANDS IN VANUATU TO CONDUCT CLINICS IN VILLAGE SETTINGS. DURING THE FIRST TWO MISSIONS ROBERT NOTICED THAT DENTAL HEALTH SERVICES APPEARED TO BE LACKING IN THESE REMOTE AREAS OF VANUATU. Although some Health Care Workers were observed extracting teeth under less than ideal conditions, few dental services appeared to be available. This is hardly surprising in a nation where more than 80% of people live in rural villages and the dentist/population ratio sits at a staggering 1:34,812 (Source: University of Queensland, Dept Dentistry, ...Continued page 6
The DDS gained an excellent result for the Melbourne Dental School which will help with our benchmarking to ensure that we stay in the top few schools in the international rankings.

The new facilities of the Melbourne Oral Health Training and Education Centre (MOHTEC) at 723 Swanston Street that impressed all the visitors to the venue for the function and a tour of the new Simulation Laboratory, the Haptic Virtual Reality Lab and the Melbourn eClinical Dental Clinic (MCD). The School celebrated the opening of the MCD orthodontics clinic recently with a special commemorative ceremony to honour two distinguished orthodontists, Stanley Jacobs and Gerald Dickinson. Both Stanley and Gerald provided outstanding service to the School, patients and the profession over many years, such that it was very appropriate to formally name the orthodontic clinic at MCD the Stanley Jacobs Orthodontic Clinic and the Director of Orthodontics suite the Gerry Dickinson Orthodontic Room. Both areas have been decorated with portraits of Stan and Gerry and these portraits were commissioned by the Australian Society of Orthodontists (ASO) and were donated to the School. The School has also received generous donations from Helen Jacobs (Stanley’s widow) and members of the ASO for research and training in orthodontics. Members of the School, ASO and the Jacobs and Dickinson families attended the function to celebrate the lives of Stanley and Gerald. The new Dean of the Faculty of Medicine, Dentistry and Health Sciences, Professor Stephen Smith also attended the function and spoke eloquently on the importance of the future relationship between the University, profession and the community in clinical training. He acknowledged the importance of donors and what their generosity facilitates in terms of research, teaching and learning. The School is extremely grateful to the generosity of the donors who have enabled the Melbourne Dental School to offer a world-class MDC training clinic as well as in the Royal Melbourne Dental Hospital and rural and regional Community Health Centres involved in training. These clinical placements rotations for the final year students have enriched their clinical training by providing a broader range of experiences in terms of patient demographics, treatment needs and clinic environments. As MDC also allows its DDS and PGD students to treat private patients this further expands their experiences by helping them to better understand the requirements of managing a dental practice in the private sector.

Doctor of Clinical Dentistry (DCD) students are now also treating patients in this new state-of-the-art specialist training clinic providing an exciting environment in which they can enhance their training in their chosen dental specialty. MDC has been structured to enable the final year DDS students to also treat patients in the specialist training clinics together with the DCD students and specialist supervisors to provide advanced clinical training in a specialist training environment.

The School received 578 applications with a preference for the DDS course in 2014 including 146 international applications, with strong interest from North American applicants. We will start the academic year in 2014 with 80 to 90 first year DDS students all very keen to use the new facilities in MOHTEC. The number of applications for the Bachelor of Oral Health course in 2013 again increased with 905 domestic, school leavers and 58 international applicants who applied through VTAC. The School is expecting 25 to 30 students to enrol into the Bachelor of Oral Health in 2014 with a minimum ATAR amongst the highest for the University’s undergraduate courses. The Melbourne Dental School provides specialist training in Orthodontics, Periodontics, Prosthodontics, Endodontics, Paediatric Dentistry, Oral Medicine and Special Needs Dentistry as part of its DCD program. We received 146 applications for the DCD and Postgraduate Clinical Dentistry courses 114 local (including 12 from NZ) and 32 international from 18 countries (Canada, China, Ecuador, Jordan, Libya, Malaysia, Thailand, Saudi Arabia, Sudan, Spain, India, Oman, Kuwait, Pakistan, Iran, United Arab Emirates, United Kingdom) We are anticipating 250 applications for the DCD and 100 for the Postgraduate Clinical Dentistry course to be received together with us in 2014. The 25 comprise 4 international (from Malaysia, China, Libya and UK) and 17 local including from QLD, NSW, WA, SA, NZ with 4 offers still to be concluded.

Australian universities will be assessed again in 2014 under the Excellence in Research for Australia (ERA) initiative. The Melbourne Dental School received a rating of 5 (well above world standard) in 2010 and 2012. The Melbourne Dental School is the only dental school in Australia to receive a 5 rating in both assessment rounds. Congratulations to all School staff and students who continue to contribute to the outstanding research output of the Melbourne Dental School.

I am delighted to report new staff appointments to the Melbourne Dental School:- Professor Peter Parashos, Chair of Endodontics; Ms Bree Jones Associate Lecturer, OIH Curriculum Development and Dr Brent Ward, Senior Laboratory Manager. Congratulations also to Dr Christine Sears, who was promoted to Senior Research Fellow, Associate Professor Menaka Abuzar who received the Vice Chancellor’s Staff Engagement Excellence award, Associate Professor Stuart Dashper who received the Alan Docking Award for outstanding contribution to dental research at the recent IADR Asia Pacific region meeting and Chau Nguyen who received the Professional Staff Award for Outstanding Contribution. These new appointments and recognition of staff achievements highlight the quality of staff of the Melbourne Dental School and explain why we are ranked #1 in Australia and in the top ten internationally.

Thank you to two long serving staff members Dr Pamela Craig and Associate professor Matthew Hopcraft who have provided exceptional service to the School over many years and have recently retired/resigned but will continue to stay associated with the School. Associate Professor Matt Hopcraft resigned in September 2013 after many years with the school both as a student and then as a staff member and associate director responsible for the Melbourne Dental Clinical Laboratory. Matt will take up a role with the ADC. The School has now slightly restructured the clinical leadership role where Associate Professor Menaka Abuzar has been formally recognised as Director of the DDS and Dr Rebecca Wong as the new Director of Clinical Education.

Congratulations and thank you to both Menaka and Rebecca for taking on these very important leadership roles within the School. Dr Pam Craig has announced her retirement from the school to take effect from December 2013. Pam has been an essential part of the school for many years in oral anatomy/radiology teaching and learning and was a key figure in creating and implementing the new DDS curriculum. We are extremely grateful to both Pam and Matt for their outstanding contributions over many years and wish them well for the future.

From the Head

In 2014 the Melbourne Dental School will implement the fourth and final year of its new four-year, graduate-entry Doctor of Dental Surgery (DDS) Program.

The student feedback for the first three years of the DDS continues to be positive with some subjects receiving very high scores in the subject evaluation questionnaires indicating high levels of student satisfaction. Recently a Site Evaluation Team (SET) from the Australian Dental Council (ADC) visited us to accredited the final year of the DDS. The independent SET comprised dental professionals from around Australia and is with some pride that I can report they gave us extremely positive feedback at the end of their site visit. Normally accreditation of student satisfaction. Recently a Site Evaluation Team (SET) from the Australian Dental Council (ADC) visited us to accredit the final year of the DDS. The independent SET comprised dental professionals from around Australia and is with some pride that I can report they gave us extremely positive feedback at the end of their site visit. Normally accreditation
**NEWS IN BRIEF**

**FAREWELL** The School bids farewell to our Director of Clinical Education, Associate Professor Matt Hopcraft, who has taken up the position of Director of Assessment and Examinations at the Australian Dental Council. Matt has worked at the Melbourne Dental School for approximately 11 years and has made an outstanding contribution. We wish Matt all the very best for his future.

**ASSOCIATE PROFESSOR MENAKA ABUZAR AND DR REBECCA WONG** have accepted two new leadership roles in the School - Co-ordinator of Clinical Education and Co-ordinator of the Doctor of Dental Surgery Degree. The School congratulates and thanks Menaka and Rebecca for taking on these new leadership roles. Menaka recently received the Vice-Chancellor’s Staff Engagement Excellence Award for her outstanding leadership and work on the Rural Dental Rotation for the Melbourne Dental School. The prize included a trophy, certificate and funding of $5,000. This is a well-deserved award for Menaka.

**CONGRATULATIONS TO PROFESSOR PETER PARASHOS** on his appointment to the Chair of Endodontics. This is a fitting recognition of Peter’s outstanding contribution to the School.

**DR CHRISTINE SEERS** has been promoted to Senior Research Fellow.

**ASSOCIATE PROFESSOR STUART DASHER WAS AWARDED** the Alan Docking Science Award at the recent IADR Asia Pacific Region meeting in Bangkok. The award is made on the basis of outstanding scientific achievement in the field of dental research over an extended period.

**DR THOMAS LO** (DClinDent Orthodontics 2012) is the 2013 winner of the Eldon Storey Research Award. This award is made at the Australian Society for Orthodontists Foundation for Research and Education for the best research submitted by an Australian orthodontist in the opinion of the ASOFRE examiners. Tom’s research found significant differences in the amount of enamel damage following orthodontic bracket removal using different bonding materials. Tom’s principal research advisor was Dr Nathan Cochrane. This is the fourth consecutive year that a University of Melbourne graduate has won this award.

**BOH Clinical Commencement Ceremony**

**THE ACADEMIC AND PROFESSIONAL STAFF** gathered on February 27, 2013 to witness the first Clinical Commencement Ceremony for the Bachelor Oral Health students. The symbolic event celebrated the students’ transition from their preclinical education to patient care as Oral Health Therapy students.

Prof. Michael Morgan, Deputy Head of School provided the Welcome address and emphasized the importance of the primacy of the clinician-patient relationship and the importance of compassion in Dentistry. During the ceremony, the students took, in unison, a pledge to maintain an ethical standard, professional attitudes and behaviors in their relationships with their peers, clinical demonstrators, academics, patients and the community. The ceremony included the presentation of a plaque with the student’s name engraved on it, which were distributed to the students by Ms. Julie Owen, the Bachelor Oral Health First year Coordinator.

A congratulatory reception for the students and the staff followed the ceremony.

In the future the Clinical Commencement Ceremony will be held in conjunction with the Doctor of Dentistry Second year students.

*By Susan L. Barrow, RDH, MA, MPH PhD*

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**Paediatric Dentistry News**

**IN JANUARY 2013, 2ND YEAR DOCTOR OF CLINICAL DENTISTRY (PEDIATRIC DENTISTRY) STUDENT KATIE BACH** traveled to Cambodia to provide dental screening for preschool aged children. For her thesis, Katie investigated the oral health of Cambodian newborns to six year olds. With a huge amount of help from local staff, Katie examined 350 young children in two weeks. This project was a collaboration with the international non-government organization Caring for Cambodia. Children came from villages surrounding the Siem Reap area; they arrived across rice paddies fields, four to a bicycle. Examinations were carried out in preschool classrooms with the local cows and chickens only a few meters away, a far cry from the new dental clinics at the Melbourne Dental Clinic. The prevalence of cavities was exceptionally high with over 90% of three year olds experiencing early childhood caries and all children experiencing caries by six years old.

The children were all triaged based on need for treatment and these children are now being taken to the dental clinic at Angkor Hospital for Children to receive much-needed treatment. Thanks to donations from members of St. Paul’s Anglican Church, East Brisbane, all children were provided with a toothbrush and toothpaste and University of Melbourne Masters in International Relations student Charlotte Lewis provided parents and children with individual oral hygiene instruction.

Katie has a strong connection with Cambodia; as an undergraduate dental student she spent her summer vacations volunteering with dental NGOs in both Phnom Penh and Siem Reap. She has a strong family connection to Siem Reap; her mother set up Caring for Cambodia’s school wide tooth brushing and hygiene programs.

In April 2013, Katie went back to Phnom Penh with Professor David Manton to assist with the research component of the project, which is in its initial phase of data collection. Both are involved in the Seal Cambodia project which aims to seal the teeth of 60,000 children. Katie looks forward to continuing her involvement with dental organizations in Cambodia. She is passionate about improving oral health outcomes and general health outcomes for these children.
MH Melbourne Dental School Supports

Vanuatu Dental Care

...Continued from front page


Following conversations with Robert it was decided that a proposed model be established within the existing Health Care Worker network and ideally consist of oral health education, prevention and ART targeting mainly primary and pre-school children, and oral screening/education for pregnant women and mothers of young children. With this model in mind Robert and Mike Clarke, co-director of MSM, established the Vanuatu Dental Care Service, in partnership with the Presbyterian Church Vanuatu Health Program. Funding was obtained from AusAID through Uniting World, the overseas arm of the Uniting Church in Australia and the first two Ni-Van Dental Workers, Bob Natuman and Morinda Toara, were recruited to come to Melbourne to undergo training.

Bob and Morinda arrived in Melbourne in February 2013 and underwent intensive training for four weeks in areas ranging from an overview of the Dental Care Program, lectures on oral health education, prevention, ART, infection control, visits to private dental clinics, chair-side assisting, supporting volunteer dentists, dental records, purchasing, practice manuals, computer hardware, OASIS software training, basic dental equipment maintenance, a visit to Health Promotion and Communications at Dental Health Services Victoria, production of education materials and resources adapted to Vanuatu culture, oral health education presentations in English and Bislama, and practical training in ART at the Melbourne Dental School.

Robert and Mike also helped establish a new dental clinic in Port Vila (with PCV Dental Program) to serve as a base for organising visits to schools and peri-natal clinics on the main island, Efate, as well as a referral centre for patients who cannot be treated simply by ART. Caries prevalence surveys were undertaken on Grade 1 children at two primary schools, one in Port Vila (20 children) and one outside Port Vila (20 children) on the more developed island Efate, and also in remote areas in the Banks/Torres Islands in the northern Torba province (approximately 50 children). Although the data has not yet been processed, the apparent caries prevalence is perceived to be very high in and around Port Vila and somewhat lower in the more isolated Torba province.

In the meantime, Bob and Morinda have implemented the oral health education program in schools and peri-natal clinics in and around Port Vila, and between March and June had visited 11 schools reaching 1255 children as well as screening and oral health advice for 627 individuals.

Between March and June Bob and Morinda had visited 11 schools reaching 1255 children as well as screening and oral health advice for 627 individuals.

The Republic of Vanuatu, a group of islands located in the South Pacific Ocean, is some 1750km north-east of Australia. With a population of just under 250,000 and an average GDP of just over $US3,000, Vanuatu is regarded as one of the poorest countries in the world.

In March 2013, a group of six of us organized a volunteer trip to Vanuatu during our two-week elective period. During this period, three of the group went to the Vila Central Hospital located in the capital city Port Vila, while the other three went to Northern District Hospital located in Luganville on Santo Island, the second largest city of Vanuatu.

Vanuatu has a very limited health care system, much of which relies on foreign aid for dental supplies and healthcare workers from all over the world including Australia, New Zealand, Japan and China. Vanuatu does not have tertiary education facilities for training of doctors. Local people have to travel to Fiji, New Zealand or Australia to complete their medical or dental education, which is often expensive and impractical for them.

The Dental Units in Port Vila and Santo have three dental chairs each, all of which are supplied by the aid of the Chinese Government. They are old and poorly maintained. Some treatment rooms were cramped and infection control was poor. They were lacking in equipment such as autoclaves, X-ray units, ultrasonic scalers and restorative materials, compromising the quality of treatment provided.

This volunteer trip has been an invaluable experience as we learnt to provide a range of treatments with limited resources. We provided treatment to around 150 patients, which included check-ups and emergency treatments such as temporization of carious lesions, pulp extraction and extractions. Staff and patients were appreciative of our work.

The clinics are only supplied with basic sterilization equipment. Only instruments used in invasive procedures, such as extraction forceps and luxators are sterilized. Instruments such as probes and mouth mirrors are disinfected with a chemical solution between each patient. Dentists are forced to re-use endodontic files due to limited supplies.

In Port Vila, we were also given the opportunity to visit local schools and educate the children on oral hygiene. Interaction with the local people had allowed us to gain a better understanding of their local cultures. The kids were passionate about our visits and keen to learn about oral hygiene practices. Teachers are very well trained—a promising trend to see in a developing country.

We would like to express our deepest appreciation to the Melbourne Dental School, The Oral Health CRC and GC Corporation for their great support and generous donation of dental materials and consumables. We would also like to thank our mentor, Professor Michael McCullough for his support and making our trip possible.

Cheney Chang, Leona Goh, Su Ann Tay, Jocelyn Eer, Jinwon Moon, Ji Hoo Shin

2 Weeks x 6 Volunteers =150 Patients Treated

...A Volunteering Trip to Vanuatu

by Bachelor of Dental Science Group 52

Dr. Barry Stewart

Editor’s note: (Barry’s role is to advise and assist in the implementation of a dental care service based on oral health education, prevention and treatment (including ART), utilising dental workers and a network of health care workers in Vanuatu.)
Tea Ceremony to Pray for Peace

by Professor John Clement & Associate Professor Satoshi Nagasaka
Images by Mr David Thomas

IN MAY 2012 TWO MEMBERS OF STAFF FROM THE MELBOURNE DENTAL SCHOOL VISITED JAPAN AS PART OF A TEAM COLLECTING DATA AT THE SPRING-8 SYNCHROTRON IN HYOGO PREFECTURE, JAPAN.

Professor John Clement writes:
I have been associated with Tsurumi University School of Dental Medicine (TUSDM) in Yokohama since the early 1970’s. My initial contact came about because my mentor in those days, Professor Ron Fearnhead, had already established collaborative links between his department and TUSDM. Several young Japanese scientists came to work in our labs at the London Hospital Medical College and friendships were made then that have proved to last for the rest of our lives. Professor Fearnhead eventually went to work at TUSDM Department of Anatomy for seven years prior to his retirement. During his sojourn in Japan he was refugees in their own country and so, on this occasion, some of the funds raised from tickets to attend the ceremony and the auction of fine art objects donated by prominent Japanese artists and craftspeople went to supporting those who had been displaced, lost family members, their livelihoods and their homes. As someone who has worked in the identification of victims of mass disasters for the whole of my career, this ceremony had a particularly strong resonance.

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whilst we have both trained to cope with dealing with the dead, disasters on the scale of the 2011 catastrophe in Japan are likely to change anyone’s view of the world permanently.

Amongst those who had contributed significant amounts of money in order to attend the ceremony at the Golden Temple, there was a wonderful shared sense of unity and resilience in the face of adversity. Many of the attendees were Japanese ladies who dressed in traditional kimono. They were particularly welcoming and gracious to me and David Thomas, helping to guide us through the finer points of etiquette, in what was an unfamiliar setting, even for those who have visited Japan many times.

Permission to enter the Golden Pavilion is an extremely rare privilege for anyone and again it brought home to me just how important to work of A/Prof Nagasaka and his colleagues is seen to be by the guardians of one of the most precious cultural sites in Japan and one that embodies the finest essence of its philosophy and history. It is true to say that the memories of our visit will remain with us always and we both feel proud of what we have been able to represent our university at such a gathering and in such a good cause.

Associate Professor Satoshi Nagasaka, Tsurumi University School of Dental Medicine writes:

The first “Tea Ceremony to Pray for Peace” was held on June 23, 2011 at Ginkakuji Jishoji (the Silver Temple), to provide relief for those suffering because of the Great East Japan Earthquake and to provide medical and related assistance to refugees living in Japan. The event stemmed from a new and unique UNHCR-Tsurumi University project, which has been providing free dental treatment to asylum seekers staying in Japan since February 2010. This project started with the objective of contributing to international society within Japan while using the benefits of Japanese technology. Japanese tea ceremony lovers who were touched by this project, and who wanted to become involved themselves, came up with the idea of a “Tea Ceremony to Pray for Peace”. Caring on the first ceremony’s spirit, and hearing many voices that insist on the importance of a continued rather than a fleeting support, we have decided to hold the second “Tea Ceremony to Pray for Peace – Rays of Hope – ” at Kinkakuji Rokuzon-ji (Temple of the Golden Pavilion). During the season of new green leaves at Kinkakuji Rokuzon-ji, we would like to share the power of tea with as many people as possible, which eases and softens people’s hearts, in order to strengthen the solidarity of support that lies in this world.

EVENT INFORMATION

Date: Thursday, May 31, 2012, 8:30 am – 4 pm
Venue: Ginkaku-ji (Temple of the Golden Pavilion) Services: Strong tea by Reverend Raitei Arima (Head Priest of the Golden Temple)
Weak tea by Masaki Art Museum Lunch and Sweets Special viewing: Kinkaku (the Golden Pavilion), World Heritage Auction: An art charity auction will also be held in the venue with support from artists and craftsmen who will be offering their art works to be auctioned. The proceeds from this charity auction will be all incorporated into the donation fund. The number of artists and craftsmen who have generously donated their works for auction are 35 including four living national treasures such as Mr. Jun Isezaki (Bizen ware), Mr. Kakiemon Sakaida (Arita ware), Mr. Osamu Suzuki (ceramic artist) and Mr. Kazumi Murase (lacquer artist). Among others were ex-Prime Minister Monhiro Hosokawa (ceramic artist), Prof. Satoshi Yabuuchi (sculptor at Tokyo National Univ. of Fine Arts and Music) and other prominent artists Contributions will benefit those affected by the Great East Japan Earthquake and will provide medical and related assistance to refugees living in Japan. Any remainder and the proceeds from the charity auction will also be contributed towards the above activities. The committee will determine where to make the contributions and will give the contributor a statement later on.
Dental students became international pioneers when they visited the Ian Potter Museum of Art at the University of Melbourne to examine some of the works on display.

“They were puzzled by a painting of a woman’s naked back, with her hair pulled forward covering her face,” says Associate Professor in Special Needs Dentistry Miny Borromeo. “But the longer they looked at it the more they saw – she could be sad or abused and depressed, they concluded. By the end they were loving the experience, despite their obvious doubts in the beginning.”

Last year’s gallery excursions by the special needs dental students were part of a program using art as a tool to build empathy in medical and dental students. They were so successful that Borromeo (BDSc 1991) has now made them compulsory in her second-year course to enhance empathy during the students’ studies.

“We are the first dentistry students in the world to take part in such a humanities program,” she says. “It is a landmark for the study of special needs and replaces some lecture-based teaching.”

The program’s aim is to enable the students to become more engaged with patients and she says it works brilliantly.

“It is well-recognised that medical and dental students can lose their ability to empathise by the end of their course, as they cope with its many academic and professional demands. This program is about providing them with the ability to deal with problems that arise in treating patients with challenging needs.”

Borromeo was inspired by a visit to Quebec City earlier this year with the organiser of the Potter program, Dr Heather Gaunt (BMus 1990, BADA Hon 1991, PG Dip Arts 1992), where they took part in a medical humanities conference far more advanced than anything in Melbourne.

“What we are doing is embryonic compared to what is happening in the US and Canada – we are not in the same universe. But it was reassuring to see we are heading in the right direction,” she adds.

Conference speakers included a professor of English literature and poetry, a poet in residence and an actor. Medical students and doctors have mounted their own art exhibition in Quebec for the past 11 years, asking students to express what medicine means to them. Borromeo wants to start a similar show, although she concedes it might take time to find enough contributors. “It took two years to get going in Canada,” she says, adding she would like to include practising dentists in the Potter program to “get them out of their comfort zones”.

The program, which has been operating for two years, is the only one of its kind in Australia. Gaunt, who is the Potter’s Curator of Academic Programs (Research), says it marks a striking change by emphasising the gallery’s role as a university museum.

“What we are doing is much needed because medical training has become more scientific as it has moved away from its traditional involvement with the humanities,” she says.

“Studying art increases visual observation skills that can then be applied to clinical scenarios. It demands close observation so students do not leap to conclusions.”

About 4,000 students took part in the program last year from such disciplines as commerce, computing, management and marketing, as well as about 100 from medicine and dentistry.

“I want to get students from as many disciplines as possible through the door and expose them to the arts.”

Gaunt selects different paintings to meet the needs of the various disciplines but she says the program’s application to medicine is backed by more than 15 years’ research in the US, where such programs began in Yale and Harvard and have now spread to more than 30 other academies.

Emeritus Professor of Dermatology, Dr Irwin B Braverman, who helped develop the use of art in medical courses at Yale, has written that observational skills using vision, hearing, touch, smell and taste were well developed in most doctors for much of the 20th century. But they declined as scientific scans and tests developed from the late 1970s.

“Clinical medical decision-making became unduly influenced by the tyranny of the tests, even though for many medical conditions the use of the eye and ear was sufficient to make the correct diagnosis or arrive at a limited group of diagnoses more rapidly and at much less cost,” he writes.

Gaunt’s US visit earlier this year on a Bronwyn Jane Adams Memorial Award travel grant enabled her to meet academics from Yale and Harvard where the programs originated. “I took part in the Yale course and was able to see first hand how art institutions have become thoroughly involved in teaching medical courses,” she says.

“The Yale University Art Gallery reopened after renovations last December and has become much more focused on tertiary teaching and research connections. It is a striking change.”

The art program is obligatory in the first year of medical studies at Yale, while it is an elective at Harvard. “I hope it can become an elective at Melbourne,” she says.

Evaluations of the Potter program have shown its value for students. “At the beginning there is a certain amount of cynicism because they are not certain about why they are in the gallery,” she says. “But by the end of the program about 80 per cent are really excited and the rest acknowledge its impact.”

A senior palliative care consultant at the Peter MacCallum Cancer Centre (pcmpanic.org), Dr Natasha Michael, introduced her students to the program because she was concerned that the ‘soft skills’ of bedside techniques were diminishing in the high-pressure hospital environment. “It is easier just to order a scan or blood test,” she says.

“But many students have a strong history in the humanities and just need to learn ways of applying the skills this brings. Using art, literature and poetry in teaching is useful in getting them to think outside the box.”

She says visiting the Potter is reinvigorating for the students because it is such a different, calming space compared to the hospital.

“Studying an art work can lead to improved clinical observation skills because both rely on noticing small details. We try to teach empathy by using our eyes, ears and hands.”

She says the students find that spending time in front of a painting to determine what it is about is the same as being at the bedside of a patient, listening and observing.

“That is important in building the patient’s trust,” Michael says. “The Potter program is so useful because it restores medicine’s long-standing interest in the humanities. It is brilliant.”

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Editor’s note: This article was first published in the “Melbourne University Magazine, a magazine for university alumni and friends.”
The history and philosophy of dentistry: Part 3

H.F. Atkinson

EVERY DENTAL STUDENT WHEN STUDYING ‘THE SCIENCE OF DENTAL MATERIALS’ would read that in 1843 Charles Goodyear, an American, developed a method of making soft rubber into a rigid material and that some few years later his brother Nelson, improved the method which was applied with great success to the development of artificial dentures.

Those students showing further interest would find that a new company, the Goodyear Dental Vulcanite Company, held a patent on the process and required every dentist who supplied patients with vulcanite dentures to hold a licence and pay the company a royalty on each new denture supplied. Dental history then took an exciting turn, an irate dentist, presumably objecting to this injustice, shot dead a member of the Goodyear firm. Except for a passing reference to this injustice, shot dead a member of the Goodyear firm. In the same period that Nelson Goodyear was improving and applying the vulcanisation of rubber to the preparation of artificial dentures, an English dentist Charles Stent (1807–1883), developed an impression compound with which dentists were able to produce accurate casts of the mouth that were fundamental in the preparation of crowns or metal dentures and included human, dowel crowns, teeth! The only teeth then available were those of ivory, compared to one moulded from vulcanite, was that while ‘fitting’ the ivory, the dentist required the patient to be present throughout the whole procedure, sometimes many hours spread over a period of six weeks. With vulcanite, only relatively few contact hours were necessary, first for taking ‘the impression’ and then for the ‘bite’. The actual fabrication of a denture now took place in the work room, however, once the dentist had acquired sufficient knowledge of the techniques involved, it was then generally placed in the hands of a mechanic. Only a few pieces of standard equipment such as files, scrapers and the foot powered dental polishing lathe could be pressed into service in the new treatment.

It is not easy today to contemplate a time when the ‘setting up’ of a denture in wax was unknown in the busy work room, where there was also no choice of articulator or selection of artificial teeth! The only teeth then available were those used in the preparation of crowns or metal dentures and included human, dowel crowns, tube and platinum pin. Dental ingenuity was soon evident as these teeth, excluding human which could not withstand the temperature involved in vulcanisation, were pressed into service; dowel crowns with a metal post, tube teeth with a twisted wire central post to gain extra retention, and platinum pin teeth. One important new instrument developed to increase both the efficiency of the dentist and the firm’s income, the ‘pin-roughing cutting and bending pliers’, were a most ingenious instrument (Fig. 2).

Much information concerning the process of vulcanisation was available from industry and only needed to be ‘scaled down’ for dental requirements. Temperature and pressure however could not be scaled down and consequently dental flasks, bench presses and in particular, the pressure chamber, needed to be of solid make. The waxing up 150 years ago for a vulcanite denture was virtually the same as for acrylic resins today, however, with the introduction of any new technique there is a ‘first’ and in this case it was for almost all the equipment required to create the new appliances. Everything from the vulcaniser, bench press, dental flask, plaster knives, plaster guillotine, rubber softeners and all the new small and large instruments associated with the vulcanisation of dental rubbers, had to be developed to help execute the new approach. Dental rubbers were supplied in various shades in sheets measuring approximately 7 x 16 x 0.2 cm thick and were protected on each side by an adhering layer of starched linen to prevent drying and contamination. The basic shades were dark red for the base and pink for the gum. At room temperature the rubber was stiff and non-adherent and required softening before it could be packed into the mould. The estimated amount of rubber needed for a denture was cut into squares of approximately one cm and placed on the cloth-covered frame of the rubber heater (Fig. 3). Piece by piece it was picked up on the end of a ‘packer’ (another new instrument), transferred to the mould, carefully positioned and firmly pressed into place. The dentist filled the mould taking care not to displace teeth and making sure that the holes in the diatorics were full. It was a tedious and time-consuming process requiring skill and concentration. When both halves were completed a sheet of damp cloth was placed on the lower half and a trial closure made in the bench press. Given the high viscosity of the material, progress was necessarily slow and care had to be taken to avoid tooth movement and the mould cracking. When excess rubber appeared in the ‘gates’, the mould was full and the two halves of the flask were secured with pins. Ensuring that ‘metal to metal’ contact had been achieved, the flask was then placed in a vulcaniser containing enough water to achieve the temperature and pressure required for vulcanisation. As the vulcaniser was technically a ‘pressure vessel’ its use came under the control of the appropriate government authority and as a result had to be fitted with safety devices such as safety valve, fusible plug and bursting disk. The dentist now responsible for this potential time bomb was beginning to appreciate the reasons for the practical classes and lectures in natural philosophy!

The rate of heating to achieve the temperature of vulcanisation was by manipulation of the gas supply which required continuous monitoring over a period of up to three hours. The introduction of Gartrell’s automatic pressure gauge with its ability to maintain a constant pressure at a predetermined level, was a great safety and time saving piece of equipment (Fig. 4). However, the turning ‘off’ of the gas at the end of the period was a problem to which a host of solutions and different equipment were offered including: the winding key of a mechanical alarm clock that when ‘set’ turned the gas tap to ‘off’ at a pre-determined time, and what today is most curious, a burning candle that when the flame reached a certain point, softened the wax allowing a spring to actuate the tap to similarly turn off the gas (Fig. 5).
The dentist trained during the era of the carving and fitting of a denture would most probably have expected that the new vulcanite dentures would also require ‘fitting’. The prosthetic clinic of the Dental School at 193 Spring Street Melbourne in the early 1950s still had ‘Fitting Room’ painted on the door! Surprise must have been great when it was found that the new upper denture in particular, fitted like the proverbial glove and was difficult to remove; springs and swivels were no longer required! ‘Suction’ was the new force responsible and methods of improving retention through ‘suction chambers’ and discs were tried. The application of the principle of the child’s toy—a soft leather disc with a central string—to the retention of an upper denture was a misplaced application of the forces of nature that resulted, in extreme cases, in a perforated palate. The technique was to fit an aluminium rivet in the centre of the palatal area of the cast which was automatically transferred to the denture on vulcanisation. A soft rubber washer with centre hole could replace the surrounding tissues. As knowledge increased it was realised that suction chambers as such were useless for retention, but were performing an essential function as anatomical ‘relief chambers’.

As vulcanite dentures became more widely established, further clinical and aesthetic problems developed. Patients complained that now, as he was doing all the carving and fitting of a denture, by its very nature, the new material was dull and lifeless. No matter how well polished and finished a denture might be at the time of insertion, within a few short months it was obvious that the patient had ‘false teeth’. Meanwhile the mechanics and apprentices in the work room were considering the changed circumstances for now they were actually making dentures as the dentists had a few years earlier but without an increase in pay or status. It appeared to them that the dentist was now making an even better living while they had not benefited in any way. Previously the mechanic had seen his Master take six weeks to make and fit a set of dentures that now, as he was doing all the work, was reduced to a matter of a few hours! An explosive situation was developing which will be discussed in the next edition.

The Art of Teaching: Models and Methods

Leigh Scott Gallery Baillieu Library

Louise Murray

THE EXHIBITION THE ART OF TEACHING: MODELS AND METHODS was developed by curators from the Henry Forman Atkinson Dental Museum and the Harry Brooks Allen Museum of Anatomy and Pathology to commemorate the 150th anniversary of the Melbourne Medical School. The exhibition opened 12 September 2012 in the Leigh Scott Gallery of the Baillieu Library and was one of three exhibitions produced to coincide with the anniversary. Items in the exhibition were drawn largely from the collections of the three faculty museums, with additional material generously provided by the University of Melbourne Archives, Special Collections: Baillieu Library, Baillieu Library Print Collection, and the Royal Australasian College of Surgeons.

With a particular focus on models used in the teaching of dental and medical courses in the very earliest days of the University (Fig.1), the exhibition included locally made examples from pioneering academics in the dental school, as well as exquisitely wax, papier-mâché, and plaster models, used in the teaching of anatomy, some made by the most famous French and German model makers of the day. Both dental and medical students were required to study anatomy and the difficulty of obtaining cadavers for dissection meant that three dimensional models of the body played an early important role in teaching.

Also on display were photographs, student notebooks, archival material, prints, drawings and rare dental and medical publications, all revealing and attesting to the importance of quality teaching aids in an era that predated quality teaching aids. Dentists at the Australian College of Dentistry experienced a similar need for quality teaching aids to assist with the delivery of lectures, however unlike their colleagues in Medicine who could send away to the finest European model makers of the day, dental academics were required by circumstance to produce their own models. Examples by Professor Harold Down, Major Kenneth Russell and Dr C.N. Johnson, were included in the exhibition (Fig.2). Models made to illustrate the dissection of the local fauna, and used alongside animal skeletal remains in the teaching of comparative anatomy were on display as were a set of comparative anatomy models produced by the Australian College of Dentistry in its earliest days and used to demonstrate pathological disease to students.

The University’s Cultural and Community Relations Advisory Group generously supported the publication of the catalogue A body of knowledge: the University of Melbourne in celebration of 150 years of Melbourne Medical School 1862-2012 which accompanied the three commemorative exhibitions including: the Anatomy Lesson, at the Ian Potter Museum of Art, and The Art of Teaching: Clinical Schools, at the Medical History Museum. The catalogue contains numerous colour reproductions and essays by exhibition curators and other contributors; an electronic version of the catalogue is available at: http://issuu.com/mdhscollections/docs/bok?e=7306964/1410533.

NOTES
1. See Anatomy lecture class (c1890), photograph (reproduction), Medical History Museum, MHEM3229
Nicholas Chevalier studied painting and architecture in Lausanne, Munich and Rome, and worked in London from 1851 to 1854 before arriving in Melbourne in February 1855. In Australia, Chevalier continued his interest in painting, accompanying scientific expeditions to remote areas of Victoria to document the vistas with brushes and paint. Some of the works he produced at this time are now used for comparison of land management procedures and his oil painting The Buffalo Ranges, was the first Australian painting among the acquisitions by the new National Gallery of Victoria in 1864.

In August 1855 Chevalier started working with Melbourne Punch, illustrating the second and succeeding issues of the magazine through until 1861. The first of the two illustrations reproduced here, Decidedly Unattractive (1856), shows a street theatre spectacle outside Melbourne dentist Mr James Bamford’s practice (Fig 1). The details of the house and picket fence form a backdrop which showcases the urban fabric of colonial Melbourne. Chevalier, together with his contemporary S.T. Gill depicted in their sketches, watercolors and paintings, the vistas with brushes and paint. Some of the works he produced at this time are now used for comparison of land management procedures and his oil painting The Buffalo Ranges, was the first Australian painting among the acquisitions by the new National Gallery of Victoria in 1864.

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The University of Melbourne has a number of events planned and the three museums in the Faculty of Medicine Dentistry and Health Sciences are currently developing a joint exhibition to commemorate this important event. The exhibition will focus on the role of dentistry and medicine in the war effort and will draw on the collections of the Henry Forman Atkinson Dental Museum, the Harry Brookes Allen Museum of Anatomy and Pathology and the Medical History Museum. Items will also be borrowed from collections both within and external to the University.

In order to enhance the scope of the exhibition and to present a comprehensive story, the dental museum curators are asking for anyone with material relating to the role of dentistry in WWI, who would be willing to make it available for this important exhibition, to please contact them. The curators are also interested in material relating to the Second World War which we hope to also incorporate in the exhibition. Chair of the ANZAC Centenary Advisory Board, Air Chief Marshal Angus Houston reminds us that the “ANZAC centenary will commemorate not only the soldiers who fought on the Western Front and at Gallipoli but also look to more than a century of service by the Australian servicemen and women”.

If you have any items that you think might be of interest to the curators, please contact Louise Murray on 9341 1518 or murrayl@unimelb.edu.au OR Professor Henry Atkinson on 9341 1519 or hfa@unimelb.edu.au OR Professor Henry Atkinson on 9341 1519 or hfa@unimelb.edu.au

Mary Byrne and MARY LENNON GERRATY (NEE BYRNE)
MEMORIES OF A FEMALE GRADUATE OF 1957

In the first year of the Dental course we spent most of our time at Melbourne University. The only subject studied at the old Dental Hospital in Spring Street was “Human and Comparative Dental Anatomy” in which we learnt the fine differences between human teeth and those of the brush-tailed bush rat and other creatures. We also had to carve thirty plaster teeth. I don’t think anyone failed in this subject, although the same cannot be said for Chemistry and Physics. A few of our new friends did not appear again in second year!

There were about thirty students in my intake and most of them were male. They seemed to spend a lot of time in “The Dungeon”, from which few females were excluded. What were they doing? Smoking, gambling, or just relaxing with a cup of tea and a cut lunch? I heard later that there was a lively poker school who regularly played when they were supposed to be in “up-tech” or the Prosthetics Laboratory. Since all the lectures and demonstrations were male, they were probably permitted to enter the women’s project. Incidentally, when Professor Chun Atkinson joined Professor “Fluff” Down, smoking was banned in the Prosthetics Laboratory. He was ahead of his time! He also had a healthy approach to female students. The “Girls’ Cloakroom” consisted of a tiny space with a few cupboards and a bench. It had a strange atmosphere as most of the older girls had started their course in Mildura with the Medical students and appeared to have a certain air of sophistication. It was also very confusing for me who was a young Australian girl in my year, and the Eastern Europeans converted in their own languages. Some had been dentists in their former countries, so perhaps found the practical work easier than the lectures. It was the opposite for me.

I was interested in the lectures but found the intricate carvings of wax teeth and the making of impressions tray quite difficult. Each step had to be passed by a demonstrator and Harry Gill’s dreaded words “Do it again” could send me to the cloakroom in tears. Some of the boys would then take pity on me and offer to help.

He started doing Conservative work on “live” patients in third year, and again every step had to be inspected by a demonstrator. My first patient “Lucy” was an unsuspecting teenage boy with a mouth full of cavities. Between my incompetence and the very low drill of that age, I would endure at least six sittings before each filling was completed. We were like old friends by the end of the year. There were fewer nurses than students and they seemed to graduate towards the boys! “Extension for Prevention” was the order of the day in cavity prep, the greatest fear was “exposure of the pulp.”

Fourth year was regarded as the fun year. We produced and performed in the show floor for the Dental Follies, which he produced annually. We also produced the Medical Medleys. The title of our show was “High Society!” The Nurses’ Ballet was choreographed by Denise Rawlings and our guest singer was the crooner, Vic West. At the end of the night the two announced their engagement. The other social highlight was the Dental Students At Home which was held at the New Alexandra. We also produced “The MIDS CPD 1966, Official Magazine of the Melbourne Dental Students”. The cover was for 5s.6d (35 cents). I was the Women’s Rep that year but cannot remember this being a particularly energetic role.

Our final year was quite stressful with study and the “Requirement Book” to be completed. Everyone became very conscientious as we approached the November exams. These seemed to go on for weeks and our final effort was the creation of a full upper and lower denture from scratch. As completion was held at the New Alexandra, we also produced “The MIDS CPD 1967”. The cover was for 5s.6d (35 cents). I was the Women’s Rep that year but cannot remember this being a particularly energetic role.

Some of these memories might be slightly inaccurate after sixty years, but I do remember my time at Spring Street to be happy, with just a few ups and downs. There was certainly no misogyny or prejudice. Occasionally there was a surprise—Why are you doing dentistry? You’re only going to get married anyway—or a suggestion that we could be taking men’s jobs from them in the future. Most lecturers and students had a great sense of humour and I have enjoyed our reunions every five years since 1957.

THE ANZAC CENTENARY, commemorating Australia’s engagement in The First World War, will be celebrated broadly by many institutions, in many forms between 2014 and 2018. PROFILES continued
NICOLA CIRILLO grew up in a small town in Southern Italy called Caposele, where he attended high school and graduated with distinction. His hobbies included sports and music and at that time he used to play in local rock bands.

Nicola attended university in Naples, Italy, where he graduated in Dentistry with Honours and Distinction in 2004. Soon after graduation he received the “Valerio Margiotta award” from the Italian Society of Oral Pathology and Medicine (SIPMO), a prize awarded to the best thesis of the year in oral pathology and medicine. In these early years his mentor, Professor Fernando Gombos – the father of Oral Medicine in Italy – inspired him to pursue a career in oral immunopathology. “Nicola has been the best student I have ever had in almost 40 years of academic career” – Gombos used to say publicly as well as in reference letters.

Freshly graduated, Dr Cirillo enrolled in a PhD in Biomedicine and Oral Sciences in the Department of Experimental Medicine at the University of Naples. He spent 18 months in Professor Claudio Napoli’s laboratory, in close conjunction with Nobel Laureate Louis Ignarro, thus gaining sound principles of scientific research. Then he started to travel and has never stopped since. After completing his clinical training in Oral Medicine in Italy (Naples, Florence, Palermo), USA (UCSF, San Francisco) and India (TATA Memorial Centre/ACTREC, Mumbai; Regional Cancer Center, Trivandrum), in 2008 he joined the Dental School at the University of Bristol, England, as a Clinical Lecturer in Oral Medicine. His mentor, Professor Stephen Prime, described Nicola as "the most talented person I have worked with in 25 years of academic life". Early in 2012 Associate Professor Cirillo went on to take up a visiting Professorship with consultant responsibilities in the Kingdom of Saudi Arabia (Dammam), an experience that left a mark in his life. The eagerness to broaden his academic skills has never ended and, since completion of his PhD, he earned additional qualifications in diverse academic fields, including: Certificates in Strategy and Competition in Higher Education from Harvard and Executive Coaching from Cambridge; Postgraduate Certificate in Public Health from Manchester; as well as teaching certificate from Melbourne. And he has no intention to stop.

Cirillo is author of more than 60 publications in peer-reviewed international scientific journals and more than 20 conference proceedings. He has written two books and various book chapters on autoimmune disease and cancer, and has delivered lectures and invited seminars at more than 20 meetings worldwide. He is also committed to dissemination of science and medicine, being the Editor-in-Chief of an international journal of oral medicine, member of the Editorial Board of scientific journals in the fields of dentistry, dermatology, biochemistry, immunology and cell biology, as well as reviewer for over 30 journals and funding bodies. He is President of the Italian Academy of Experimental Stomatology (AISS).

Nicola is currently the youngest academic professor (Level D/E and equivalent in US/UK) within the world’s top 10 medical faculties (QS ranking), and the youngest in his field in Australia. For more info, please visit: www.nicolacirillo.com

www.dent.unimelb.edu.au/dsweb/about_school/staff_profiles/cirillo_n.html