

Melbourne Dental School





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Dent-AL is the magazine for alumni of the Melbourne Dental School.

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NOTE: For space and readability, only degrees conferred by the University of Melbourne are listed beside the names of alumni in this publication.

The University of Melbourne acknowledges the First Peoples of Australia, the Aboriginal and Torres Strait Islander peoples. We acknowledge the traditional custodians of the lands on which each campus of the University is located and pay our respects to the Indigenous Elders, past, present and emerging.

WELCOME FROM PROFESSOR ALASTAIR SLOAN

When I arrived in Melbourne in January 2020, little did I know what a year it would be. I had hoped to spend the first few months getting to know the staff, the students and how the entire Melbourne Dental School operated.

But when COVID-19 hit last year, things quickly halted. We spent much of the first few months moving courses online, designing new online content, re-focusing School operations and working out how we could continue to deliver high quality clinical placements in the safest possible way.

I knew before joining the University of Melbourne that it had a fantastic reputation, but what I didn't know was just how dedicated our staff and students are. The resilience, understanding and patience of both staff and students has been extraordinary to see. It cannot continue like this however and the School now needs to embed the extraordinary, blended content it has developed into the 2021 academic year and beyond.

Now that restrictions have eased in Melbourne, it is important the School looks forward. The COVID pandemic shone a light on the challenging aspects of our business (as it has on many dental schools across the world). With 2021 well underway, I am focusing on the items that I had planned for last year – in particular, our curriculum review and strategic research review. I will be reaching out to you, our alumni, for your thoughts and opinions on which areas of our programs we can improve, what works well and more importantly how we can best prepare our students for the modern clinical workforce. Alongside this will be a refresh of the School's governance structures to set us up for future challenges and opportunities.

Part of this work has already begun with a restructuring of our Senior Management Committee and the creation of three new divisions with a broader home for academic staff and a stronger critical mass for academic endeavours and activity, be



that biomedical and clinical research or education/pedagogical research. We have also created our Learning Teaching and Quality Committee, chaired by our Director of Learning and Teaching Dr Rebecca Wong to drive forward our education agenda.

I will also be exploring opportunities to enhance the School's international research standing. As a researcher myself I have reaped the rewards of international collaboration and exposure. I have been lucky in my career in Cardiff to lead a large University research network and latterly the School of Dentistry, both of which built strong international research partnerships. My ambitions here in Melbourne now are to help elevate the positive reputation of the Melbourne Dental School by increasing the impact of our research on an international level. The creation of the DentAlliance, a partnership between Melbourne Dental School, and the Dentistry faculties at King's College London, University of North Carolina and National University of Singapore, addresses current challenges dental schools, and indeed universities, face. By working together, we can shape dental curriculum and training and oral/ dental research for future needs and be leaders rather than fast-followers. I am delighted that initial projects have started between the partner Schools.

This agenda of change, MDS'25, is designed to create a sustainable School for the long-term to deliver world class education and

research, creating outstanding clinicians and scientists to address the challenges facing oral health. I hope you, our alumni, will be excited to see the changes ahead.

As I write this, it is now 17 months since I arrived in Australia with my family and despite the disruptions of last year, we have all settled well into life here in Melbourne. I say Melbourne as it is only in the past few months that we have been able to visit some of this beautiful state of Victoria that the Sloan family now call home.

While it was wonderful to see many of you at our Reunite Online program last year, I am more and more positive that we'll be able to get back to some in-person events later this year and beyond, where we can meet and get to know each other.

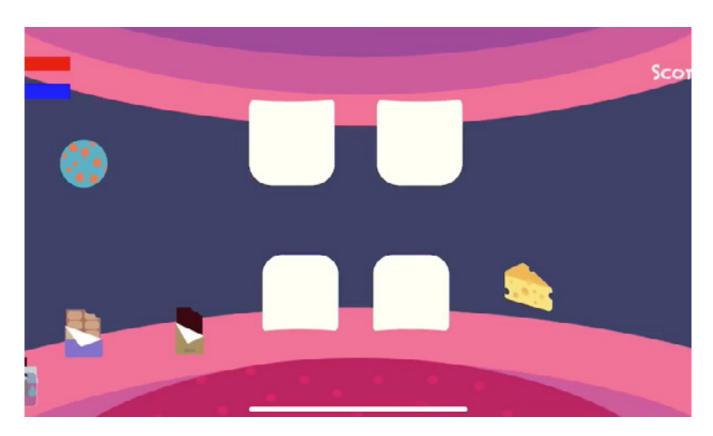
The COVID-19 pandemic has impacted us like never before and I'm sure many of you have had challenging times. I am very interested to hear how you have been impacted and how we can best support our alumni community into the future. I acknowledge the dedication and hard work of our dental community and commend you on rising to this challenge. What I can say is that the opportunities for change are great and the future is exciting.

I look forward to a smoother year ahead and hope to see you all soon.

Professor Alastair J Sloan

Head, Melbourne Dental School.

LATEST NEWS



TOOTH SAMURAI

Teaching families about oral health through app-based gaming.

Around 40 per cent of children in Australia experience some dental decay by their sixth birthday, 60 per cent of which goes untreated.

Parents are primarily responsible for maintaining the oral health of young children. However, they often show a lack of oral health knowledge when managing their children's diet and oral hygiene.

In 2018, the Royal Children's Hospital surveyed 2073 parents and found that:

- Half the parents don't know that tap water (containing fluoride) is better for teeth than bottled water
- A third of the children don't have their teeth brushed twice a day
- A quarter of the pre-schoolers consume and/or fall asleep with sugarsweetened drinks most days of the week (e.g. juice, cordial or soft drink).

Melbourne Dental School (MDS) research piloted a study to evaluate the feasibility and effectiveness of game-based learning to address this gap in knowledge. MDS collaborated with app developers to create Tooth Samurai, an iOS mobile game, aimed at parents of young children to improve their oral health knowledge.

Tooth Samurai pits players against a swarm of drifting bacteria that must be eliminated via a physical swipe (simulating a toothbrush) to keep teeth free from decay. As the game progresses different items that advantage or disadvantage the player also appear, including tap water, toothpaste, chocolate, soft drinks, juice, milk and cheese.

The project concluded that game-based learning is as beneficial as conventional discussion-based learning in improving the oral health knowledge of adults.

Head to the App Store to download Tooth Samurai: https://apps.apple.com/us/app/tooth-samurai/id1459747963

This app is available only on the App Store for iPhone and iPad.

2020 QUEEN'S BIRTHDAY HONOURS

PROFESSOR EMERITUS PERRY F BARTLETT AO (BDSc 1970, PhD 1975)

Officer of the Order of Australia for distinguished service to neuroscience research, and to people living with dementia, motor neurone disease, and spinal cord injury.

DR JOHN E MATTHEWS AM (BDSc 1965, MDSc 1969)

Member of the Order of Australia for significant service to dentistry through professional associations, and to education.

OUR ALUMNI



DR GAREEMA PRASAD

Originally from Darwin, Gareema (BDSc 2006, PhD 2016) has 14 years of private practice clinical experience in Melbourne, Singapore and India. Gareema has also completed her PhD in Oral Cancer at the Melbourne Dental School (MDS).

"The things that attracted me to the Melbourne Dental School were the eminent teachers, high-quality, world recognised research, and the wider University of Melbourne ecosystem. As the best dental program in Australia, it was great to be accepted by the School."

Gareema's grandfather was a doctor in Darwin and she has always had an interest in health sciences. "I saw close up the impact he had on people's lives and the community. I felt dentistry combined the rigor of diagnosis and also gave the satisfaction of hands-on work."

Gareema has recently established a dental training centre in Mumbai, India which aims to create a platform where high quality CPD courses are offered to dentists in India and the surrounding region.

"Moving to India to start a world class training institute and dental health centre has been a new challenge for me. The journey from clinician, to researcher, to entrepreneur has made me cultivate different skill sets.

"The need for CPD in India couldn't be higher. The country graduates one of the highest numbers of dentists in the world, however there is a large variation in quality. There is also the need to continuously improve and differentiate your skill set. This is why I founded the International Dental Education Center (IDEC), to bring the best dental continuing education to India."

The Melbourne Dental School is very excited to run a Masterclass in Prosthodontics at IDEC when current travel restrictions make this possible. This will be the first CPD course run by MDS outside of Australia and will be delivered by:

- Associate Professor Roy Judge (MDSc (Clin) 1998, PhD 2006), Head of Prosthodontics and Director of CPD at MDS
- Dr Carolina Perez Rodriguez (PGDipClinDent 2014, DClinDent 2018), President of the Australian Prosthodontics Society Victoria Branch.

Gareema has a long standing association with the Melbourne Dental School and is looking forward to building the relationship between IDEC and MDS into the future. Further details of the Masterclass in Prosthodontics will be announced soon.

DR TOM CLARKE

For dental professionals, the very nature of their work brings a level of inevitable risk in this era of infectious disease.

Dr Tom Clarke (BBiomed 2011, DDSc 2016) is an Emergency Dentist at the Royal Dental Hospital of Melbourne (RDHM), where a typical day oscillates from simple restorations to complex root canal treatments and oral surgery.

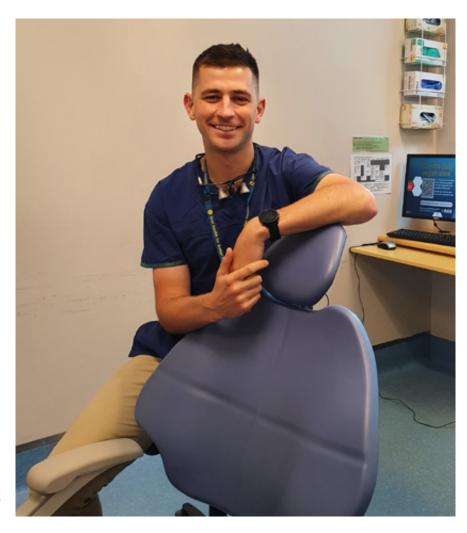
Every patient is a new challenge, and care is as much about treatment as it is about developing rapport, understanding medical histories, and diagnosing their concerns. For Dr Clarke, who has worked across several settings, from standard leafy suburban private practice to a remote FIFO role in South Australia, it is the complexity of emergency dentistry that he finds most rewarding.

Nonetheless, the COVID-19 pandemic has only elevated the difficulties of everyday clinical work for dental professionals. Working in patients' mouths and performing aerosol generating procedures are unavoidable aspects of dental practice. Dr Clarke has been dealing with the heightened risk of COVID-19 transmission, which has meant wearing uncomfortable N95 masks, face shields, and hot gowns while performing procedures that are challenging at the best of times.

Furthermore, he explains how "simple things like communication have become more difficult as it has become appropriate to wear masks all throughout an interaction. Verbal skills are in my opinion, invaluable for patient communication and these are hindered with a mask!"

In periods of high community transmission, there have even been restrictions on the use of certain tools like 'the drill' or 'handpiece', forcing some innovation and on-the-spot thinking.

Dr Clarke underlines the rapid adaptations his team have made as a result of the pandemic. Telehealth has been the order of the day in the health sector, and dentistry is no exception. Dr Clarke reflects that "If there was one health sector that would struggle to move to a virtual environment I would say it would have been dentistry.



But the Teledentistry program is working well at RDHM, providing advice to patients on what is considered urgent, what they can do for pain at home, and generally reducing the traffic flowing through the hospital to reduce COVID risk."

The opportunities for innovation in dentistry give Dr Clarke hope to enact future change. When asked what keeps him awake at night, he describes being confronted daily by a high incidence of preventable disease: "we live in a very fortunate society, but healthcare outcomes could be (and should be) better for all Australians. It's sad for example, to see a child that requires multiple, preventable dental extractions that will likely lead them down a pathway of lifelong dental complications." He sees the importance of health leadership to solve these bigger picture problems that translate into everyday clinical encounters.

It is perhaps this inspiration that sees Dr Clarke back at the University of Melbourne pursuing an MBA. Growing up in Perth, he had always been naturally attracted to the institution, where he completed his Bachelor of Biomedicine followed by the Doctor of Dental Surgery. With the foundation in biomedical sciences, he chose to build on this with a more clinically focused degree. Now Dr Clarke hopes to refine his skills in leadership and management and use this strategic thinking skillset to lead healthcare teams, make a difference and help others.

This teamwork mindset is one that Dr Clarke encourages current students to cultivate at university and beyond. His motto is "network, network, network and create connections with as many other students as you can," noting that it adds tremendous value to the experience both socially and academically. A piece of advice he offers that holds true to the collaborative environment of his workplace today is that "a group of minds is better than one." It is a timely reminder that collective energy, cooperation and synergy are invaluable in steering us through dark times.



FRIENDSHIP, PASSION AND GIVING BACK AT THE CORE OF THIS SUCCESSFUL PARTNERSHIP





Daniel Sable (BDSc 1995, PGDipClinDent 2002, MDSc (Clin) 2002) and Andrew Pepicelli (BDSc 1994, PGDipClinDent 2003, MDSc (Clin) 2003) are Melbourne Dental School alumni, long-time business partners and honorary staff members at the University of Melbourne.

Having met during university, Daniel and Andrew now own and operate Sable and Pepicelli Orthodontics in Chadstone and Peninsula Orthodontics in Mornington.

"We were loosely acquainted with each other in Dental School, however we became close friends during our postgraduate program in orthodontics, which we finished one year apart.

"Because we had developed an intimate knowledge of each other's personal values, work ethic, clinical skills and business aspirations, going into partnership was a logical choice for us. Our partnership is now 16 years young, and we feel very lucky to have embarked on this professional journey together."

Both worked in general dental practice before moving into orthodontics. Andrew was inspired by the positive impacts orthodontic treatment had on his patients' lives.

"I distinctly remember how keen many of my patients were to 'show off' their teeth to me after their fixed appliances were removed and how proud patients were that they had achieved a significant milestone in their lives. This was something that I felt I needed to be a part of!"

Daniel was drawn to the transformative nature of orthodontics and the ongoing opportunities for professional refinement.

"As a general dentist, I became fascinated at how patients with significant malocclusions when I referred them out, came back from the orthodontist with a perfect bite and a radiant smile.

"One of the things I love about orthodontics is that I have never stopped learning.

Experience does not necessarily make you a better orthodontist, as every patient and every malocclusion is different. The challenges of attaining an excellent result are there just as much today as they were on my first day out in practice."

With two successful clinics to run, workdays are typically busy but rewarding.

"We usually get into the office early, to catch up on admin and any outstanding emails. Patient care is carried out between 8.00 am and 5.30 pm. The day varies between adjustments of fixed and removable appliances and checking aligners, new patient and review consultations, bondings and debands.

"We went in thinking that we would improve a patient's smile or occlusion, without realising that we sometimes have a positive impact on their development as a person.

"The gratitude that patients show during or after treatment is certainly one of the more surprising, yet satisfying, aspects of our work"

As honorary staff members at Melbourne Dental School, Andrew and Daniel support the education of the next generation of orthodontic professionals. Both lecture part-time in the Doctor of Dental Surgery program and 'Introduction to Orthodontics' continuing education program. Andrew is currently a Clinical Demonstrator in the postgraduate orthodontic program, a role Daniel has also held previously.

"Interacting with the postgraduate students is a highly rewarding aspect of our work at the Dental School. Being constantly questioned by the postgrads about treatment planning and/or clinical decisions, as well as treatment mechanics, benefits us as much as them.

"Because they are up to date with new developments in the literature and are often willing to try new things clinically, we can't help but be drawn into that. We then return to our private practices, asking those same questions and applying that new knowledge to our own patient treatments.

"As clichéd as it sounds, it really feels good to 'give back' to the profession. One of our more enduring memories from our postgrad days was the gratitude we felt towards our honorary demonstrators, who willingly gave so generously of their time, so that we could attain the best education possible.

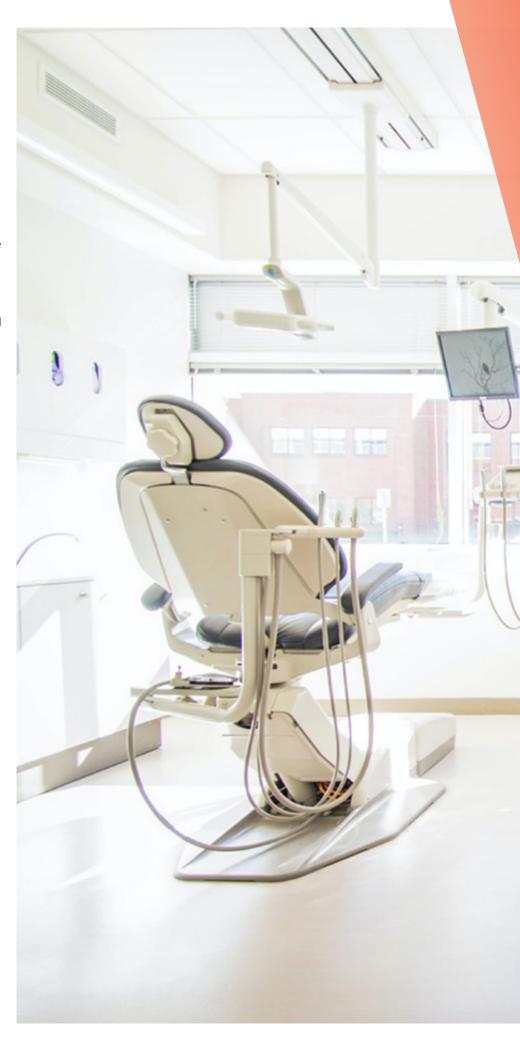
"Knowing that we might be helping to give the current cohort of postgrads the opportunities for a more rounded specialist education is certainly reaffirming. Our specialty is a particularly collegial one, and our role at the University allows us to further develop those relationships with like-minded members of the profession. For those reasons, our advice to anyone contemplating a role at the School is – go for it."

Having forged successful businesses and careers in the field of orthodontics, Daniel and Andrew's advice for today's current dental students is simple.

"In an often commercially driven society, always remember that you are a member of a noble profession.

"You are in a privileged position, to enable people to improve their health and wellbeing. Act with humility, generosity and collegiality, and success will automatically follow."

Are you interested in becoming an honorary staff member at the Melbourne Dental School? Find out more at mds-honoraries@unimelb.edu.au





Technology has unlocked the secrets teeth can reveal about our health. Here, researchers describe a new approach for providing a more detailed understanding of human life history.

Throughout our lifetimes, our bodies become a record of significant amounts of life history information.

There are scars on broken bones and past infections remembered by our immune system, but our teeth can also provide a fascinating insight into our health, life, and environment – past and present.

As the hardest calcified components of the body, teeth often remain well preserved even over millennia.

When teeth are recovered from archaeological or forensic sites in a controlled and standardised manner, they can create a time capsule of life history, allowing scientists to study the lives of people and populations in great detail.

Tooth and jaw conditions can provide data on diseases like caries (cavities) and periodontitis, a severe gum infection. They can also reveal information about the nutrition and hygiene of individuals and entire populations. The size and shape of teeth can shine a light on our origins.

WHAT ARE TEETH MADE OF?

As we know, teeth are complex calcified structures whose primary function is to break down food. A human tooth is formed of three mineralised tissues called enamel, dentine, and cementum, and a soft tissue called dental pulp.

Acellular extrinsic fibre cementum (AEFC), one of the five types of cementum, is deposited in a regular annual rhythm around the cervical two thirds of human tooth roots, with varying degrees of mineralisation.

Annual growth of AEFC results in alternating dark and light banding called an incremental line. By counting the number of incremental lines and adding them to the year of the eruption of the tooth observed, we can estimate chronological individual age.

AEFC can also help scientists identify life history parameters like pregnancies, skeletal trauma, and renal disease. To do this, they use optical or light microscopy to observe hypomineralised (meaning low mineralisation) growth layers of AEFC, known as incremental lines.

READING HEALTH AND LIFE HISTORY FROM TEETH

Various tooth tissues – enamel, cementum, and dentine – reflect our genetics, but through growth and ageing they sustain numerous internal and external influences, some of which remain recorded within the tooth (micro)structure and/or composition.

Our international team of researchers wanted to investigate to what extent optical microscopy could be used to understand the visual effects of teeth tissue mineralisation on inferring life history.

To do this, we effectively worked backwards, taking a sample with a known life history – a 66-year-old woman with six full-term pregnancies at known ages. The samples from this patient provided an ideal opportunity to cross-check any resultant pregnancy-cementum mineralisation relationship using multiple microscopic analytical methods, not just optical microscopy.

Her tooth was extracted during routine dental work and analysed with permission using the standard techniques of optical and electron microscopy, but also using Time-of-Flight Secondary Ion Mass Spectroscopy (ToF-SIMS).

ToF-SIMS can analyse the spatial distribution of atoms and molecules, and NASA uses it to investigate cosmic materials such as moon rocks and comet dust. This project was the first time ToF-SIMS has been used for this purpose.

IDENTIFYING A NEED FOR CAUTION

Published in the Journal of Analytical Atomic Spectrometry, we found that optical microscopy wasn't reliable for visual detection of the patient's known series of six pregnancies and that electron microscopy wasn't reliable in detecting variations in the degree and distribution of cementum mineralisation at a micrometre level.

This meant accurate estimation of the tooth cementum mineralisation distribution wasn't possible using light and scanning electron microscopy alone.

Using ToF-SIMS, we did detect decreased calcium in the cementum of a patient who had six full-term pregnancies, but the incremental lines' visual effects were unrelated. As a result, individual pregnancies can remain undetected and researchers must be far more cautious in identifying precise numbers.

While ToF-SIMS analysis holds great promise, we concluded that far more caution is required and more work needs to be done before researchers can link observed lines in this tissue to life history causes.

Although optical and electron microscopy can be useful for investigating certain microanatomical aspects of the various tissues, like identifying incremental growth layers within cementum, they must be used cautiously.

Optical microscopy can potentially help us see the visual effects of certain 'crisis' events, like pregnancies, skeletal fracture or trauma and kidney disease, but without deeper knowledge of the underlying processes of cementum formation, we aren't able to identify or understand the causes of the crisis we are observing.

The use of ToF-SIMS was found to be more suitable for the investigation of elemental and chemical composition of cementum, as it is a highly sensitive instrument for this type of analysis.

When used in clinical studies, ToF-SIMS can help us better understand the effects of tissue development and its resulting chemical composition.

This knowledge can be used in dentistry to help choose more suitable clinical treatments and may also be valuable in the field of tissue regeneration and engineering.

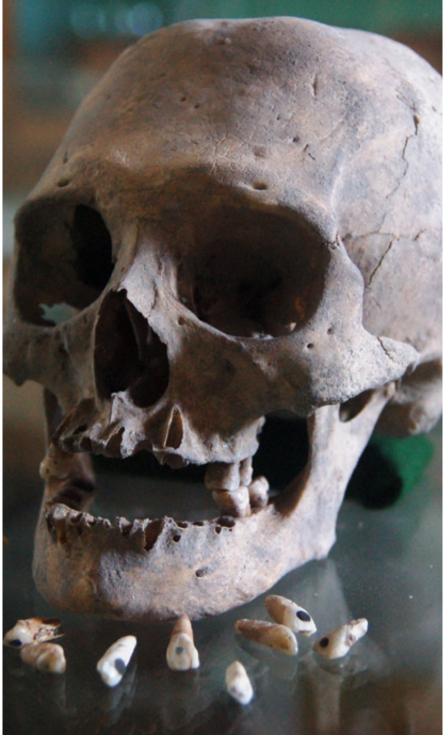
Finally, it offers forensic and biological anthropology a new approach for life history parameters detection.

For instance, this technique is important forensically when you only have teeth available to identify an individual, and for biological anthropologists who wish to calculate fertility rates in the past.

By Dr Marija Edinborough

Melbourne Dental School, University of Melbourne

This article was first published on Pursuit. Read the original article online: pursuit.unimelb.edu.au/articles/storiesteeth-can-tell



 ${\sf ToF\text{-}SIMS}\ analysis\ of\ a\ tooth\ sample.\ Picture:\ Imperial\ College\ London,\ Royal\ School\ of\ Mines$

DIGITAL BIOPSIES FOR EARLY DETECTION OF ORAL CANCERS

Oral health professionals may soon be able to detect oral cancers more effectively thanks to a new project led by the Melbourne Dental School and Victorian technology company OptiScan.

The insidious nature of oral cancer means it is often detected at a later stage; up to half of individuals who are diagnosed have large tumours as oral cancer is often painless and unseen.

A further challenge is the limited tools to detect and monitor potential oral cancers and skin lesions over time, forcing clinicians to remove suspicious lesions by scalpel biopsy and assess pathology.

A new project led by Dr Tami Yap (BDSc 2006, PhD 2019, DClinDent 2019) and Professor Michael McCullough (BDSc 1982, PhD 1995, MDSc (ParaClin) 1997) of the Melbourne Dental School will aim to identify individuals who are likely to develop oral cancer, without invasive biopsies.

THE BENEFITS OF 'DIGITAL BIOPSIES'

Oral cancers are often preceded by changes to the colour and thickness of the skin of the mouth. Only three to five per cent of people with these changes will develop an oral cancer, but without a biopsy, it is very difficult to determine which lesions are cancerous or not. These biopsies can be painful and invasive.

After the biopsy, the sample is assessed by a pathologist to see if there is any cancer present or not. The assessment by the pathologist can only be made on the small piece of skin that has been sampled, which may limit its effectiveness.

With the hand-held confocal laser endomicroscope (CLE), tissue can be viewed in 3D with 1,000-times magnification. This could allow clinicians and surgeons to diagnose cancerous tissue in real time, reducing or eliminating the need to have one or more biopsies taken and sent to a laboratory for analysis.

The earlier the diagnosis can be made, and the less tissue we remove, the better for the patient.



A NEW APPROACH TO TRACKING ORAL HEALTH

Alongside trialing the CLE, our project will also develop software to comprehensively record an annotated map of the patient's mouth with OptiScan as well as our other project partner, MoleMap.

This will allow us to compare a patient's mouth map the next time they come in, so we can see if anything has changed. We can also use special dyes that show us all the cells in the skin surface or a dye which only binds to molecules that are found more commonly in cancer, thus identifying 'hot spots' of skin growth.

Our broader Mouthmap™ project will enable us to collect of a large amount of data to compare this new CLE technology to diagnosis using standard light microscopy, establishing a new standard of diagnosis and allowing advancement of both human and computer algorithm-based learning. We hope this will provide a solid foundation to advance towards clinical trials and recommendations for changes in standard of care.

The participants of this clinical study will be recruited by invitation, including from Victoria's main oral precancer referral centre, networked with regional community centres where only health care card and pension card holders are eligible for treatment. This is important because lower socioeconomic status as well as increased age are both considered risk factors for oral cancer.

Our goal is that this technology will help reduce the requirement of scalpel biopsy in the future, allowing for more comprehensive assessment of skin changes in the mouth and earlier detection of oral cancer.

The Melbourne Dental School trial is due to commence in September this year, by referral. The Melbourne Dental School has partnered with OptiScan, a Victorian company awarded a grant of almost \$1 million by the Australian Government through the Medical Research Future Fund in collaborative clinical research projects to improve screening and early diagnosis of oral cancer. This project was one of 21 national projects funded in 2020 through the BioMedTech Horizons Program and administered by MTPConnect.



MDHSMENTORING PROGRAM

We are so pleased to be offering the MDHS Mentoring Program again this year.

The program is an 8-month commitment that commenced as a virtual program in March 2021. Mentors and students are matched according to study area or degree, as well as interests, experience and preferences for meeting arrangements.

While last year came with many challenges, our mentors and students engaged with the program and gained a lot from it.

"I have thoroughly enjoyed the process of supporting final year dentists in training in their transition from student to workplace professional. As a woman in a surgical field, I see my role to help to break down any perceived gender barriers, as well as any barriers that may exist between the specialist and general dental community. 2020 was challenging with Covid-19,

because I only interacted with my mentee virtually mostly, but we were both glad to spend some time together in person and in my practice eventually." – Dr Mehrnoosh (Nu) Dastaran (MPhil (DentSci) 2017).

"The mentoring program was invaluable to my final year, especially with clinical placements on a 5-month hiatus. Fortunately, my mentor, Dr Jodie Dobson, lived within 5kms of me and we regularly caught up for walks. These weekly catchups allowed me to feel strongly supported on both an academic and personal level during the trialling times of such bizarre year" – Krishen Thayanantha, (DDS 2021 and 2020 mentee).

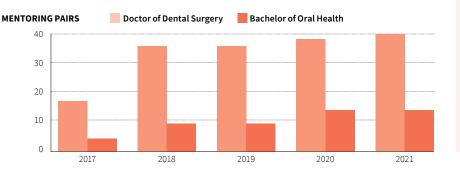
To find out more about the MDHS Mentoring Program, please visit: mdhs.unimelb.edu. au/engage/alumni/mentoring



54% OF FINAL YEAR DDS STUDENTS AND 36% OF FINAL YEAR ORAL HEALTH STUDENTS HAVE BEEN MATCHED WITH A MENTOR IN 2021



15 MDS MENTORS RETURNED FROM THE 2020 PROGRAM



CLINICAL MENTORING PROGRAM FACILITATED BY THE MELBOURNE DENTAL SCHOOL

This year, we are thrilled to be trialling a clinical mentoring program to establish mentoring networks and techniques to support graduates in their first year of clinical practice and beyond.

The program will commence three months before students are due to graduate and will comprise of six online sessions. Mentoring will be undertaken in groups of 10 students.

Mentors will share their insights with students and will need to be experienced general practitioner dentists.

The first three sessions will work through case studies designed by MDS. In the last three sessions, student will work through their own case studies, based on their experience in the workplace.

The program will provide students with a clinical framework that can be applied immediately and allow mentors to experience a greater sense of engagement with early career dentists.

If you would like to be involved in the clinical mentoring program, please register your interest with Sue Gillespie at

sue.gillespie@unimelb.edu.au

OUR STUDENTS

AN INTERVIEW WITH ELSHADAIE (ELSH) TAFESSE, THIRD YEAR DDS STUDENT

Twenty years ago, Elsh was living in Dadaab, Kenya, one of the largest refugee camps in the world. Today, he has successfully completed his second year of the Doctor of Dental Surgery at Melbourne Dental School. Not only is he the first member of this family to attend university, he is also well on his way to being the first to put *Dr* before his name.

Needless to say, Elsh's journey to Melbourne hasn't been easy, nor conventional. Raised by two strong and loving parents, Elsh is determined to achieve his goals and make his family and people of Ethiopia proud.

"As an international student from Canada, raised in Kenya and originally from Ethiopia, I have travelled a lot to get where I am today!

"My mother and father did their very best for me despite the harsh conditions we lived in. My mother used to cut her dresses down to make clothes for me. My father didn't wear shoes, but he would work hard to buy shoes for me.

"They say it takes a village to raise a child, and I believe my childhood exemplified this notion. I grew up in a refugee camp that was marked by ethnic and religious differences, however an entire community had a hand in raising me, and as a result I was able to speak three different languages by the time I was four years old. My first language was Amharic, which is the official language of Ethiopia, and I am proud to say I still speak my language fluently."

While undertaking the DDS and moving to Melbourne hasn't come without its challenges, Elsh is finding it to be the experience of a lifetime.

"My DDS experience has been absolutely amazing, I wake up every day excited to learn something new. The DDS program at the University of Melbourne is challenging, however the teaching style and instructors are excellent and provide us with the means to overcome every hurdle. The student body is extremely supportive, and the upper year level

students have been an invaluable resource for mentorship and advice; it feels like a big family where classmates and instructors want to see you reach your full potential.

"Living in Melbourne has also been a great experience. I love the diversity found in the city and the multi-culturalism reminds me of Canada where people from all over the world contribute their unique heritage. I was happy to find an Ethiopian community here and I was able to treat my classmates to authentic Ethiopian food."

There have been many highs and lows along the way – one moment that stands out is meeting an Ethiopian patient at the Melbourne Dental Hospital.

"I wear a little green, yellow and red badge on the collar of my white coat when I'm in the clinic. One day as I was going up the elevator at the dental hospital, an Ethiopian woman came on the elevator and she asked me 'are you Ethiopian?' I responded to her in Amharic and she said 'how could I not recognise one of my own sons. I'm proud to see one of us here.'

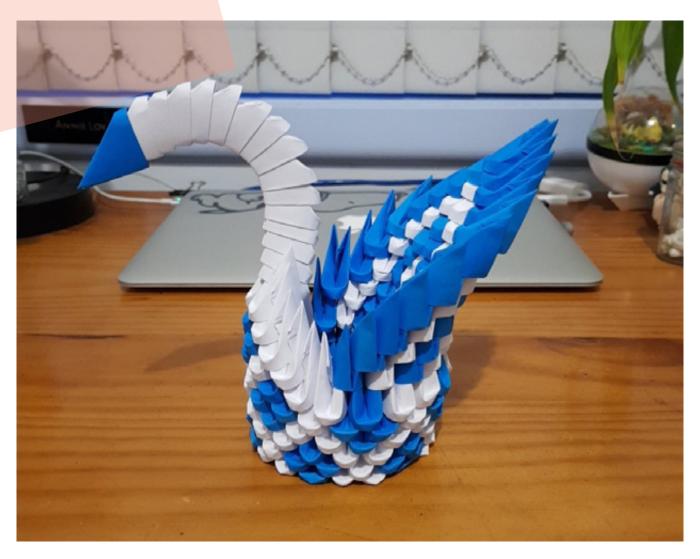
"This was a special moment for me because I've always dreamed about making my country and people proud. It just goes to show you that representation matters and it's inspiring to see someone who looks like you as a professional."

Elsh cannot wait to become a qualified dentist, give back to his community and inspire the next generation to chase their dreams.

"One day I hope to go back to the refugee camp that I was born and raised in and provide free oral care and oral health literacy to those who are still living in the circumstances that I had the good fortune to escape. I want to be able to speak to the people of Dadaab and let them know that I was in the same exact situation they are in now.

"My family and I had to sleep in a tent just like them, we had to live off two kilos of food every month, we experienced hunger and poverty just like them, but there's hope for all of us, all we need is faith, a positive attitude, a kind heart to help others, and a desire to wake up every morning ready to give your best. I think seeing someone that was just like them come back better than he left would be a source of inspiration and hope."





AN INTERVIEW WITH ANNIE LOV (BOH 2021)

WHAT WAS IT LIKE TO STUDY THROUGHOUT COVID-19?

It was a difficult year especially since my last year was meant to be placement all year round. We had a break for about six months with online learning which did keep our minds working but trying to maintain hand skills was quite difficult. During the year, it was difficult to keep up my motivation to revise and spend more time not just sitting down. However, being able to go back to placement in rural Victoria, and then in Melbourne, was definitely great, especially being able to see my peers and work alongside them.

WHAT INSPIRED YOU TO MAKE 3D ORIGAMI AND YOUR YOUTUBE TUTORIAL?

I had been making 3D origami since high school but decided to pick it up again during the lockdown. It was a nice creative outlet as well as keeping my hands moving. The video tutorial was an opportunity offered to me by the MDS social media team who had noticed my origami through my lecturer's twitter account. After making this it has inspired me to make my own professional social media to continue sharing my creative projects which I want to incorporate my dentistry skills into.

WHAT HAS BEEN THE BIGGEST CHALLENGE OF THE DEGREE SO FAR?

I think in first year the amount of theory and seeing patients is quite challenging. However, down the track I think the biggest challenge has been going back into clinic this year, getting used to seeing patients and making use of our manual dexterity again. Becoming familiar with those skills again and communicating with the patients were skills that initially felt rusty but over time came back to me.

IS THERE AN ASPECT OF THE DEGREE THAT YOU'VE ENJOYED THE MOST OR AN ACHIEVEMENT THAT YOU'RE MOST PROUD OF?

I think I've grown a lot as a person through this degree and learned to become more independent through both studying and seeing patients. I've also learned to communicate with individuals of all ages. One memorable experience was being on rural placement in Morwell and making full use of my scope as well as exploring the local area with my peers.

IS THERE ANYTHING ELSE YOU'D LIKE TO ADD?

I would like to thank my lecturer Clare McNally for encouraging us to find ways to maintain our hand skills during the lockdown. Due to her inspirations and creative ideas, I found a way to keep up my skills, enjoy a hobby and now develop my own professional social media as an oral health student.

If anyone is interested please check out my Twitter **@alov_11** and Instagram **@alov.11**.

DENTAL EXHIBITION

DENTISTRY: INNOVATION AND EDUCATION - DENTAL **COLLECTIONS ON DISPLAY**

In 1912, the Melbourne Dental Students' Society presented to John Iliffe a photograph of the finalyear class. It was a fitting gesture to one of the founding figures of dental education in Victoria, which originated with a professional body seeking to secure a respected program of training for dentists.

The exhibition Dentistry: Innovation and Education and accompanying publication celebrate the 135th anniversary of the establishment of the Odontological Society of Victoria, which brought about the development of the first dental school in the colony. The society consisted of a group of trained dentists and was modelled on the Odontological Society of Great Britain, established in 1856. Dentistry: Innovation and Education explores the development of dental practice, education and public health in Victoria. The exhibition will be on display until 26 September 2021 at the Medical History Museum, University of Melbourne.

The exhibition includes pieces from the collection housed at the Henry Forman Atkinson Dental Museum. This collection is intrinsically linked with the Odontological Society of Victoria. At an early meeting the society decided to create a library and museum, for which 'Mr Blix, a member, gave a cedar wood cabinet'. The museum was further nurtured by Iliffe (1847-1914), a member and later president of the society, and it formed the basis of our collection today. Objects and documents from the collections of the Henry Forman Atkinson Dental Museum, the Australian Dental Association Victorian Branch, University of Melbourne Archives, and the Medical History Museum document this history of innovation and education in Victoria.

Many of our early dental practitioners came from Europe, bringing with them various practices and learning traditions. The Utrecht University has loaned items that reveal the early technologies of 18th- and 19th-century dental care as the province of the wealthy. A remarkable inclusion is the personal dental kit of Empress Marie-Louise of France (1791-1847), the second wife of Napoleon Bonaparte.

DR REINA DE RAAT, CURATOR, UNIVERSITY OF UTRECHT COMMENTED:

"It is well known that Napoleon Bonaparte was very concerned about his oral health and teeth. He often used toothpicks; as a result, toothpicks and toothpick boxes became popular among his entourage. Boxes of ivory or tortoiseshell covered with gold were manufactured and purchased by this elite, to demonstrate their good taste. Napoleon even gave his second wife, Marie-Louise, Duchess of Parma (1791–1847), a box containing various dental instruments suitable for surgical interventions and oral hygiene."

Technology has always influenced dentistry. From the development of toothbrushes, to changes in materials used to make dentures, and increasingly sophisticated equipment such as drills and chairs, a few highlights are included here. The McConnell chair was a gift from the family of the late Henry Forman Atkinson in 2017. Restored by Professor Atkinson, it represents a significant step in chair technology as it could easily be folded and carried.

The last 135 years have seen a transformation of the practice of clinical dentistry: from tooth-pullers to dental surgeons. This has been achieved through the development of educational institutions and the application of technical innovation and scientific research to dental practice. In Victoria, the catalyst was the formation of the Odontological Society in 1884. The legacy of its dedicated members lives on.



Presented to J. Iliffe Esq. from the Melbourne Dental Students' Society, 1912, photograph, 45.5 × 57.5 cm. HFADM 3128, Henry Forman Atkinson Dental Museum, University of Melbourne.



Dental care kit, c. 1814–28, oak, veneer, silk (box); metal, gold, mother-of-pearl, ivory (instruments); box 21.6 \times 14.4 \times 8.0 cm. KNMT K-622, Royal Dutch Dental Association.

VALE

DR ROBERT MALCOLM COOK AM

12/11/1928 - 22/08/2020

As a highly accomplished oral and maxillofacial surgeon, Bob Cook (BDSc 1952, MDSc 1958) was a major figure and leader of the specialty nationally and internationally. He was highly respected as a teacher and mentor to many trainees and junior surgeons.

Bob served as President of the Australian and New Zealand Association of Oral and Maxillofacial Surgeons from 1981-1983. Elected as the first Australian President of the International Association of Oral and Maxillofacial Surgeons from 1992 to 1995,

he highlighted Australia in the international arena and brought international innovations to our country. His service to the profession was recognised with the award of Member of the Order of Australia in 1989.

After moving to the eastern suburbs of Melbourne from Bluff, on the southern coast of New Zealand, Bob was accepted to study dentistry at the University of Melbourne in 1948. He attended both Mildura and Melbourne campuses and in later years was a resident of Ormond College, graduating in 1952.

After serving as the first Resident Dental Officer at The Royal Melbourne Hospital in 1953, Bob travelled to the United Kingdom for further surgical training at The Eastman Dental Hospital in London, which was the British hub of postgraduate dental education at the time.

When Bob completed the MDSc (Melb) in Oral Surgery, he was appointed as oral surgeon to four Melbourne public hospitals: The Royal Melbourne, Western General, Prince Henry's and Preston and Northcote Community Hospital, to which he provided on-call services for facial trauma. Many of these calls were the result of motor vehicle accidents because seatbelts were not common at the time and drivers and passengers were often propelled through the windscreen during an accident, causing severe facial injuries.

Eventually Bob restricted his trauma load to Royal Melbourne Hospital where he became Head of Unit in 1971, a position he held until 1988. In this post he supervised the training of a generation of oral and maxillofacial surgeons in Victoria and attracted trainees from all over Australia to come to Melbourne and learn from him.

Bob was an innovative surgeon who advanced the care and correction of patients with both acquired and developmental facial deformities. In 1964, following a study visit to Hugo Obwegeser's Unit in Zurich, he performed the first mandibular osteotomy (reconstruction of the lower jaw to correct a severe bite and facial deformity) in Australia, several years before these procedures were

adopted in the United States. This early pioneering work set the scene for the rapidly developing field of orthognathic (corrective jaw) surgery, in collaboration with orthodontists. He was also integral to the development of the multi-disciplinary model of care for head and neck cancer patients at the Royal Melbourne Hospital, that combined the expertise of general, ear nose and throat, plastic and oral and maxillofacial surgeons.

Bob was a highly energetic, enthusiastic and thoughtful practitioner and was regarded as a skilful, quick surgeon who led by example. As observed by many of his colleagues, he had a steel trap memory for detail, recalling names of those he met, often only fleetingly.

As President of the Victorian Branch of the Australian Dental Association in 1964 he actively participated in building a relationship between the profession and government through committee work. Always a team player, he was instrumental in establishing and examining in the Specialty Fellowship in Oral and Maxillofacial Surgery, within the Royal Australasian College of Dental Surgeons.

At the University of Melbourne, he taught and examined at undergraduate and postgraduate levels. He supported the development of the MDSc in OMS and assisted in guiding the University processes to adopt the FRACDS(OMS) as a national standard. His lasting legacy at the University of Melbourne is the establishment of The Robert and Gillian Cook Family Award for enrolled post-graduate students to support research in oral and maxillofacial surgery.

Always a devoted family man, Bob is survived by his wife Gillian, children Hamish, Alistair, Matthew, Kirsten and nine grandchildren. His broadly rounded life of service and commitment was well-lived. He will be remembered fondly by his family, friends and colleagues. RIP

COMPILED BY:

Professor David Wiesenfeld, Professor Andrew Heggie AM (both former trainees with Bob) and Mr Hamish Cook, Bob's eldest son.

DR JOHN ERIC HENRY MOODY AM

6/8/1923 - 19/4/2020

John Moody (BDSc 1947) was born in Canterbury, Victoria to a returned war veteran school teacher and a daughter of Scottish settlers from the Western District of Victoria. His father went on to become a headmaster and the founding principal of Balwyn High School. After a year in Wangaratta State School he went to Hamilton State and High School before completing five years at University High School.

John studied dentistry at the University of Melbourne from 1942 to 1947 and graduated with first-class honours in orthodontia.

During his first year of dentistry John encountered Jesus Christ and this changed the course of his life. He joined the Melbourne University Evangelical Union and the Anglican League of Youth and after graduating, the Rev J.B. Montgomerie of the CMS arranged for him to become Australia's first flying dentist in the Northern Territory. With Darwin as his base, he flew with the Northern Territory Aerial Medical Service (later RFDS) to provide dental care around the Top End.

During 1948 a combined Australian and American "Arnhem Land Scientific Expedition" was undertaken. John was invited to join this to investigate the oral conditions of the Indigenous population with the Nutrition Unit of the Expedition (recorded within the four-volume report published by Melbourne University Press, 1960). This study subsequently became a benchmark in observing the effect of changing dietary habits on Indigenous dentition.

At the end of 1949 John was invited to take up a position as Senior Lecturer in dentistry to medical students at the Christian Medical College, Vellore, South India. At the time the college required the subject for full recognition of its medical degree and also lacked a Dental Department. After arriving in early 1950, John proceeded to set up the dental department beginning with a treadle



drill and folding chair. He trained staff and built up the department into a functioning unit. He had a name for being a stickler for detail and hygiene and would personally scrub and clean the clinic once a week. Of necessity, he treated large numbers of oral surgical cases and pioneered oral and facio-maxillary surgery in India. He developed methods of jaw reconstruction following treatment of oral cancer and the treatment of severe osteomyelitis. He had several articles published in the Australian Dental Journal¹ and while he was there Sir Peter MacCallum visited the college and wrote a glowing reference about his work. The Dental Department is now a large modern institution, but it has been said that some of his dental work has lasted more than fifty years in the mouths of some of his older patients and some of his insights are still being applied successfully in the department today.

At the end of 1955 he returned to Australia for two years and married Valda Cashmore in 1956. After working for a period in Ballarat, he returned to India to work with students with the Union of Evangelical Students of India. He worked in Kotagiri, Calcutta and Shillong during which time two of his children were born. Valda became increasingly unwell during her third pregnancy, so the family returned to Australia at the end of 1961 and John settled into dental work in Australia.

In 1962 he worked assisting Dr Sam Yescovitch in Kew. In 1963 he bought the practice of Dr Alex Bremner in Hartwell and in 1968 set up practice in Highfield Road, Hartwell. He maintained his interest in oral surgery through the years and often undertook operations for Dr Brian Lee, orthodontist. At Brian's suggestion he applied for and received official recognition as an Oral Surgeon in Victoria when this was being established as a new specialty.

John sold his practice to Dr Peter Delahey around 1983 but continued to work there until the end of 1999.

Val died of cancer in 1992 which was a great loss to him, although it did not diminish his faith, which he continued to explain to all who would listen. In 2001 he moved to Fiddler's Green Retirement Village in Berwick where he remained until the last three weeks of his life.

In 2016 John had the Order of Australia AM conferred on him for significant services to clinical dentistry, particularly in remote Indigenous communities, and in the establishment of oral cancer treatment programs in India.

John was always a 'doer' and even in his last weeks of life was dreaming up useful devices to improve things around the house. He also maintained his dry sense of humour and sharp insight into life's issues until he passed away. He is survived by four appreciative children and eighteen grandchildren.

By: Dr Stephen Moody (MBBS 1982)

¹ Australian Dental Journal (1953, 57: 150-157) "Some Cases of Fractured Mandible"; (1955, 49: 399-400) "A case of Infected Dentigerous Cyst in Ramus"; and (1958, 3 (2): 85-96) "Osteomyelitis of the jaws and its treatment" Also of interest (May 1949: 145 – 151) "Supplementary Data Supplied to the Nutrition Group of the Arnhem Land Scientific Expedition, 1948"; (Oct 1952: 262 – 263) "Dentistry at the Christian Medical College, Vellore, South India".



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Melbourne Dental School