New Zealand Society of Endodontics

Endodontic Symposia 2025

Module 1: 18 June, 7:30 – 9:15pm (NZT)
18 June, 7:30 – 9:15am (NZT)
Topic: Advanced irrigation - Use of laser in Endodontics
Speaker: Adjunct Professor Giovanni Olivi

This webinar delves into the evolving role of advanced laser irrigation techniques in enhancing the efficacy of root canal disinfection. Traditional irrigation methods often fall short in fully debriding complex root canal anatomies, leaving behind biofilm and debris. Laser-activated irrigation (LAI), including PIPS (Photon-Induced Photoacoustic Streaming) and SWEEPS (Shock Wave Enhanced Emission Photoacoustic Streaming), offers superior cleaning and disinfection through enhanced fluid dynamics and deep penetration. This session will cover the science behind laser irrigation, clinical protocols, equipment considerations, and evidence-based outcomes, supported by real-world case demonstrations.

Learning Objectives:

1. Understand the principles and mechanisms of laser-activated irrigation in endodontics.
2. Compare different laser irrigation techniques such as PIPS and SWEEPS.
3. Learn how laser irrigation improves cleaning efficacy in complex canal systems.
4. Review clinical protocols and case examples demonstrating the use of lasers in endodontic irrigation.
5. Evaluate the current evidence on laser irrigation outcomes and its integration into modern endodontic practice.

ADJUNCT PROFESSOR GIOVANNI OLIVI

Giovanni Olivi is an Adjunct Professor in Endodontics, Conservative Dentistry and Paediatric Dentistry in the Degree Course of Dentistry and Masters in Laser Dentistry at the University of Genoa. He graduated with honours in Medicine and Surgery at the University “La Sapienza” of Rome. He specialised with honours in Dentistry at the University of Rome Tor Vergata and Aesthetic Medicine at the International Foundation Fatebenefratelli Hospital in Rome.

He has maintained a deep interest in laser enhanced dentistry, endodontics, microscopy, implants and aesthetics. In 2007 he was honoured with the “Leon Goldman Award” for clinical excellence in Nashville (USA) and subsequently obtained his Masters with the American Academy of Laser Dentistry (ALD, USA) in 2009.
He is the scientific coordinator of the Italian Academy of Microscope Dentistry (AIOM) and an active board member of the Italian Society of Endodontics (SIE) and European Academy of Paediatric Dentistry (EAPD).
Giovanni Olivi is currently adjunct professor and scientific director of the postgraduate course “Laser in Dentistry” at Università Cattolica del Sacro Cuore di Roma (UCSC) and is also cooperating with several universities worldwide on laser research & education.

He has been invited to speak at more than 150 international conferences, he is a scientific advisor to several industry journals and author of numerous publications. Prof. Giovanni Olivi is the author of the following books:

- Laser in Dental Traumatology, (in Italian, 2010 – Martina).
- Pediatric Laser Dentistry: a user’s guide, (2011 – Quintessence).
- Laser in Restorative Dentistry: a practical guide, (2015 – Springer).
- Laser in Endodontics: scientific background and clinical applications, (2016 – Springer).

Module 2: 23 July, 7:30 – 9:15pm (NZT)
Topic: IAN (Inferior Alveolar Nerve) - Anatomical variation, identification and consideration to limit iatrogenic damage, Case reports
Speaker: Dr Wayne Gillingham

This webinar explores the anatomical complexity and clinical significance of the Inferior Alveolar Nerve (IAN), emphasizing the importance of accurate identification and careful planning to avoid iatrogenic injury during dental procedures. Variations in the course and branching patterns of the IAN can pose significant risks, especially in implantology, third molar extractions, endodontics, and orthognathic surgery. Through anatomical review, radiographic interpretation, and case-based learning, participants will enhance their understanding of how to recognize high-risk scenarios, apply protective strategies, and manage complications if they arise.

Learning Objectives:

1. Understand the anatomical course and common variations of the Inferior Alveolar Nerve.
2. Learn how to interpret radiographic and CBCT findings to accurately identify the IAN.
3. Recognize clinical situations with increased risk of IAN injury and how to plan accordingly.
4. Explore case reports illustrating iatrogenic nerve damage and how it was managed.
5. Apply practical strategies to minimize the risk of nerve injury during common dental procedures.

DR WAYNE GILLINGHAM

Wayne has an outstanding academic record, with qualifications in Dentistry, Medicine and Surgery. He has specialist qualifications in medical and surgical problems affecting the face, jaws and mouth. See the “Patient information” section for more information.

Wayne has formal training in the full range of Oral & Maxillofacial Surgery and has gained 3 years experience in the United Kingdom as well as his years spent in hospitals throughout New Zealand. He is trained to a specialist level and has been formally recognised by his colleagues and government regulatory bodies to provide Specialist care since 2004.

Keeping up to date with new technologies, procedures and therapies is a continual process. As well as weekly multidisciplinary interaction Wayne participates in more than double the required continuing medical education activities. He has regular speaking engagements to educate other health professionals on new developments.

Wayne has excellent working relationships with his colleagues. He participates in regular multidisciplinary clinics with other specialists for Head & Neck Cancer, Cleft lip and palate, Facial Deformity and Craniofacial Syndromes, Sleep Apnoea and Complex dental cases.

Wayne meets with the other OMFS surgeons from the central region and upper South Island on a regular basis for ongoing Clinical Audit and case reviews. He regularly consults with experts from around the world regarding complex cases.

Module 3: 13 August, 7:30 – 9:15pm (NZT)
Topic: Biomimetic consideration in restoring Root filled teeth
Speaker: Professor Sema Belli

This webinar focuses on the principles and clinical application of biomimetic dentistry in the restoration of root-filled teeth. Root canal treatment often leaves teeth structurally compromised, making them more prone to fracture and failure. By embracing biomimetic strategies—restorative techniques that aim to mimic the natural structure, function, and strength of the tooth—clinicians can preserve more tooth structure and enhance long-term outcomes. The session will discuss material selection, adhesive techniques, and conservative preparation designs that align with biomimetic philosophy, supported by clinical cases and evidence-based protocols.

Learning Objectives:

1. Understand the core principles of biomimetic dentistry and their relevance in restoring endodontically treated teeth.
2. Learn how to select materials and techniques that replicate natural tooth biomechanics.
3. Explore conservative preparation strategies that prioritize structural preservation and long-term durability.
4. Review clinical cases demonstrating successful biomimetic restoration of root-filled teeth.
5. Gain insights into the current evidence supporting biomimetic approaches in endodontic restorative care.

PROFESSOR SEMA BELLI

Dr Sema Belli graduated from Marmara University, Istanbul, Türkiye with DDS, and received her PhD degree in the Department of Operative Dentistry from Selçuk University, Konya, Türkiye. Her supervisor was Professor Fusun Özer. Dr Belli founded the Department of Endodontics in Faculty of Dentistry and worked as a chair for more than 10 years. She worked at Tokyo Medical and Dental University with Dr Junji Tagami, Dr Shigehisa Inokoshi and Dr Hidehiko Sano. During her stay in Tokyo, she had the chance to meet Dr Takao Fusayama and visit Dr Nobuo Nakabayashi in his own office. She had chance to collaborate with Dr Nikaido, Dr Shimada, Dr Otsuki, Dr Yamada, Dr Yoshikawa, Dr Nakaoki, Dr Ogata and Dr Perreira. Dr Belli learned the micro tensile test method in Japan and immediately after her return, she opened the first mechanical research laboratory in her faculty with the help of her colleagues from the dental school. Selçuk University, Dental Faculty laboratory was the first laboratory where micro tensile test could be carried out in Türkiye. She learned how to create fibre reinforced fixed partial dentures, polyethylene fibre build-ups and fibre splints directly from Dr Inokoshi by assisting him in TMDU Clinics. Dr Shigehisa Inokoshi introduced her to Dr Ray Bertolotti and Dr David Rudo. She received her first Ribbond set directly from Dr Rudo during the 1998 IADR Meeting in Nice, France. That was an unforgettable moment for her.

Dr Belli has published and lectured extensively on dental composites, adhesives, glass or polyethylene fibre-reinforcement restorations, conservative restoration of extensive cavities, restoration of endodontically treated teeth, post and core restorations, finite elemental stress analysis, bonding to the endodontic surfaces, biomimetic dentistry, stress reduced restorations of root-filled teeth (by using fibres) and biocompatibility of dental materials. She lectured about fibre-reinforced composite restorations during 2007 and 2011 European Society of Endodontics Meetings (ESE). These lectures were the first lectures about ‘Stress-reduced restorations by using fibres’ in ESE Meetings. She collaborated with Dr David Alleman, Dr Simon Deliperi, Dr Grant Chyz, Dr Wistasp Karbhari, Dr Gürcan Eskitaşcıoğlu, Dr Oğuz Eraslan, Dr Serhan Akman and Dr Sema S Hakki.

Dr Belli worked as a board member at Continental European Division of IADR (CED-IADR) (2017-2021) and organised workshops to the young researchers about ‘Tips and tricks for (Oral/Poster) presentations’ with Dr Imad About. She chaired and organised CED-IADR Awards during her duty. Dr Belli also worked as board member at the Turkish Endodontic Society and at Advanced Technologies Center of Selçuk University (İLTEK). She worked as ERASMUS Coordinator of Dental Faculty for more than 10 years. Now she is a full time professor in Faculty of Dentistry, Selçuk University and board member at Scientific Research Projects Center (BAP) of the University.

Selçuk University Dental Faculty is the first and only faculty that offers Biomimetic Restorative Dentistry Course to undergraduate students in Türkiye.

Module 4: 29 August, 11:00 – 12.30pm (NZT)
28 August, 5.00pm - 6.30pm (Colorado)
Topic: Deep Margin Elevation
Speaker: Dr John Khademi

The traditional management of deep direct and indirect finish lines and margins are thought to rest on several discrete concepts such as ferrule, biologic width, finish line design, fit and finish-ability. These concepts and attendant principles and procedures deserve revisiting with the magnification that is available using the Surgical Operating Microscope (SOM). Through that lens, one might see the principles themselves as manifestations of the poor process-outcomes of the traditional explorer/tactile-based model of dental practice that the concepts were intended to prevent. We will revisit the linked concepts of 3D ferrule, finish lines, fit and finishability with what is possible with the SOM.

Learning objectives:

1. How the traditional discrete models of ferrule, biologic width and finishline/fit/finishability have lead to treatment models that have not worked as advertised.
2. New mental models linking these three concepts can lead to different treatment models.
3. How the vision-based endodontist can leverage those treatment models in practice.

DR JOHN KHADEMI

Dr. Khademi received his DDS from the University of California San Francisco and his certificate in endodontics and did his MS on digital imaging from the University of Iowa. He is in full time private practice in Durango Colorado and was Associate Clinical Professor in the Dept. of Maxillofacial Imaging at USC and is Adjunct Assistant Professor at SLU. In his “prior life”, he wrote software for laboratory automation, instrument control and digital imaging. He lectures internationally about CBCT, clinical trial design, outcomes, and conventional endodontic technique. As a Radiological Society of North America (RSNA) member for over 25 years, his background in medical radiology allows him a perspective shared by very few dental professionals. He has contributed to many sections and chapters in textbooks and is the lead author for Quintessence’s Advanced CBCT for Endodontics: Technical Considerations, Perception, and Decision-Making.

Module 5: 25 September, 7.30 – 9.15pm (NZT)
Topic: Understanding theoretical basis of Adhesive post-endodontic treatment
Speaker: Dr Daniel Černý

This webinar focuses on the theoretical foundations and clinical implications of adhesive techniques in post-endodontic restoration. Endodontically treated teeth are structurally weakened and more susceptible to fracture, making adhesive restoration methods critical for long-term success. Participants will gain a deeper understanding of the biomechanics of endodontically treated teeth, the bonding interface, and how to select materials and protocols that optimize adhesion and durability. The session emphasizes evidence-based principles behind adhesive strategies, offering insights that guide clinical decision-making for optimal restorative outcomes.

Learning Objectives:

1. Understand the biomechanical changes in teeth following endodontic treatment and their implications for restoration.
2. Explore the theoretical principles of adhesion in the context of post-endodontic care.
3. Learn about adhesive materials, bonding protocols, and their selection based on clinical scenarios.
4. Recognize the role of adhesive restorations in preserving tooth structure and preventing fractures.
5. Apply evidence-based strategies to enhance the longevity and success of adhesive post-endodontic restorations.

Module 6: 2 October, 7.30 – 9.15pm (NZT)
Topic: Clinical tips and tricks in Adhesive post-endodontic treatment
Speaker: Dr Daniel Černý

This webinar provides a practical, case-based guide to adhesive techniques for restoring endodontically treated teeth. Building on foundational knowledge, the session focuses on real-world clinical tips and tricks that improve efficiency, predictability, and outcomes in adhesive post-endodontic restorations. Topics include managing deep margins, selecting the right adhesive systems, optimizing isolation, layering techniques, and troubleshooting common challenges. Whether you're restoring with composite, fiber posts, or onlays, this webinar equips clinicians with actionable insights to enhance day-to-day restorative practice.

Learning Objectives:

1. Apply practical adhesive techniques for restoring root-filled teeth in various clinical scenarios.
2. Learn how to manage challenging cases, such as deep subgingival margins or limited isolation.
3. Understand how to choose and handle adhesive materials and fiber posts effectively.
4. Gain insight into layering and build-up techniques to enhance aesthetics and function.
5. Troubleshoot common issues in adhesive post-endodontic restorations to improve long-term success.

DR DANIEL ČERNÝ

Daniel Cerny (*1974) has received his dental degree at the Charles University, Medical School in Hradec Kralove, Czech Republic (1998). Doctorate degree earned at Palacky University in Olomouc in 2018 with the topic of adhesive aesthetic reconstruction. Private practice in Hradec Kralove limited to endodontics and adhesive dentistry since 2001. Previously an assistant professor at Charles University, Medical School in Hradec Kralove at the Dpt of Conservative Dentistry and Endodontics (1998-2007). Immediate Past President of the Czech Endodontic Association (CES) 2015-2023. Member of the Scientific Board of the Czech Dental Chamber. (since 2022) Co-founder and the first president of Czech Academy of Dental Esthetics (CADE) (2007-2009). Editorial board member of LKS journal (Czech Dental Chamber Journal) (2009-2013). Co-owner and CEO of the continuing education institute HDVI since 2010. Member of AAE. Author/co-author of 36 articles in dental journals. Co-author of 4 chapters in dental books. Lectures widely internationally.

Module 7: 20 October, 7:30 – 9:15pm (NZT)
Topic: Role of occlusion in Endodontics
Speaker: Dr Andrea Shepperson

This webinar examines the critical interplay between occlusion and endodontics, highlighting how occlusal issues can both mimic and contribute to endodontic pain. Often misunderstood or overlooked, occlusal problems can present as toothache or persistent discomfort, leading to misdiagnosis or unnecessary endodontic treatment. The session will cover how excessive or imbalanced occlusal forces can affect pulp health, contribute to post-treatment symptoms, or compromise healing in endodontically treated teeth. Through clinical examples and diagnostic guidance, participants will gain practical tools to differentiate true endodontic pathology from occlusion-related pain.

Learning Objectives:

1. Recognize how occlusal problems can mimic endodontic symptoms and contribute to diagnostic challenges.
2. Understand the role of occlusion in the development and persistence of endodontic pain.
3. Learn how to assess and manage occlusal factors during and after endodontic treatment.
4. Explore clinical cases where occlusion played a key role in either causing or resolving endodontic-like symptoms.

DR ANDREA SHEPPERSON

Dr Andrea Shepperson is one of New Zealand's best-known dentists and educators, with a referral-based clinical practice managing tooth wear and interdisciplinary reconstruction of the worn dentition. Author of Managing Tooth Wear: A Comprehensive Guide for General Practice, Andrea graduated from the University of Otago in 1984 and is the owner of Shepperson Education, a dedicated teaching facility on Waiheke Island in Auckland. Her events have a strong emphasis on evidence-based clinical strategies and their implementation. Her responsiveness, use of technology, and ability to distil complex concepts into pragmatic solutions help dentists prepare for the future.

As a practising clinician, she understands the hearts and minds of dentists and their daily challenges. She brings a wealth of international knowledge, networking, and high-level engagement with some of the leading dentists of the world. She is a mentor and alumna of the internationally renowned Kois Center in Seattle, USA, New Zealand's only Digital Smile Design KOL and Master, running New Zealand's first DSD Clinic. Andrea is a Clinical Teacher and Postgraduate Tutor of The MSc Aesthetic Dentistry Programme, King's College London Faculty of Dentistry, Oral and Craniofacial Sciences, London. She is an Honorary Life Member of the NZ Academy of Cosmetic Dentistry and a Global Ambassador for Slow Dentistry. A contributing author to Practical Procedures in Aesthetic Dentistry, she contributes to publications, podcasts, webinars, and expert panels in the development of dentistry globally.