

## Thursday, May 23

<b>Room 3</b>		<b>5F Hall B5 (2)</b>
9 : 00 ~ 10 : 30	<b>Pre-Congress Course Lecture</b> Clifford J. Ruddle (Santa-Barbara, USA) Supported by DENTSPLY MAILLEFER/ DENTSPLY-Sankin K. K.	
11 : 00 ~ 12 : 30	<b>Pre-Congress Course Lecture</b> Sergio Kuttler (Nova Southeastern University, USA) Supported by DENTSPLY MAILLEFER/ DENTSPLY-Sankin K. K.	
13 : 30 ~ 15 : 00	<b>Pre-Congress Course Lecture</b> Zvi Metzger (Tel Aviv University, Israel) Supported by OSADA ELECTRIC CO., LTD.	
15 : 30 ~ 17 : 00	<b>Pre-Congress Course Lecture</b> Ghassan Yared (Tronto University, Canada) Supported by MOKUDA Ltd./ VDW GmbH	
<b>Hands-On Seminar Room</b>		<b>5F G502</b>
11 : 00 ~ 12 : 30	<b>Pre-Congress Course Hands-On Seminar A</b> Clifford J. Ruddle (Santa-Barbara, USA) Supported by DENTSPLY MAILLEFER/ DENTSPLY-Sankin K. K.	
13 : 30 ~ 15 : 00	<b>Pre-Congress Course Hands-On Seminar B</b> Clifford J. Ruddle (Santa-Barbara, USA) Supported by DENTSPLY MAILLEFER/ DENTSPLY-Sankin K. K.	
<b>Hands-On Seminar Room</b>		<b>5F G504</b>
9 : 00 ~ 12 : 00	<b>Pre-Congress Course Hands-On Seminar C</b> Zvi Metzger (Tel Aviv University, Israel) Supported by OSADA ELECTRIC CO., LTD.	
<b>Hands-On Seminar Room</b>		<b>4F G405</b>
13 : 30 ~ 15 : 00	<b>Pre-Congress Course Hands-On Seminar D</b> Sergio Kuttler (Nova Southeastern University, USA) Supported by DENTSPLY MAILLEFER/ DENTSPLY-Sankin K. K.	
15 : 30 ~ 17 : 00	<b>Pre-Congress Course Hands-On Seminar E</b> Sergio Kuttler (Nova Southeastern University, USA) Supported by DENTSPLY MAILLEFER/ DENTSPLY-Sankin K. K.	
<b>Hands-On Seminar Room</b>		<b>5F G505</b>
9 : 00 ~ 12 : 00	<b>Pre-Congress Course Hands-On Seminar F</b> Ghassan Yared (Tronto University, Canada) Supported by MOKUDA Ltd./ VDW GmbH	
14 : 00 ~ 17 : 00	<b>Pre-Congress Course Hands-On Seminar G</b> Bertrand Khayat (Private Dental Practice, France) Supported by HAKUSUI TRADING CO., Ltd.	

Friday, May 24

Room 1

4F Hall C

- 8 : 45 ~ 9 : 15 **Opening Ceremony**
- 9 : 15 ~ 10 : 30 **Plenary Lecture**  
 Chairperson Hideaki Suda (Tokyo Medical and Dental University)
- PL. An Overview of Regenerative Endodontics**  
 Kenneth M. Hargreaves (University of Texas Health Science Center at San Antonio, USA)
- 10 : 50 ~ 12 : 00 **Keynote Lecture 1**  
 Chairperson Patrick Bogaerts (IFEA President)
- KL.1 Improving Endodontic Treatment Outcomes and Prognosis**  
 Paul V. Abbott (University of Western Australia, Australia)
- 12 : 15 ~ 13 : 00 **IFEA President-elect Lecture (with Lunch)**  
 Chairperson Peet van der Vyver (Endodontic Society of South Africa, South Africa)
- Limited Field Cone Beam Computed Tomography (CBCT) in Endodontic Practice**  
 Samuel O. Dorn (IFEA President-elect)  
 Martin Levin (USA)
- 13 : 10 ~ 14 : 20 **Keynote Lecture 2**  
 Chairperson Samuel O. Dorn (IFEA President-elect)
- KL.2 Biofilms and Biology Set Limits to Technology in Endodontics**  
 P. N. R Nair (University of Zurich, Switzerland)
- 14 : 40 ~ 17 : 40 **Country Representative Speakers 1**  
 Chairpersons Marco Martignoni (Italian Endodontic Society, Italy)  
                   Mallet Jean Philippe (French Society of Endodontics, France)
- CR.1 A Single File for a Better Shaping : Myth, Reality or Commercial Approach ?**  
 Mallet Jean Philippe (French Society of Endodontics, France)
- CR.2 Cleaning and Shaping : a Simple Procedure**  
 Marco Martignoni (Italian Endodontic Society, Italy)
- CR.3 Reciprocation vs. Rotary Instrumentation**  
 Hanjo Hecker (University of Bale, Switzerland)
- CR.4 Management of Multiple Avulsion, Luxation and Crown Fracture : a Case Report**  
 Iuminada Lagamia Vilorio (University of The East, Philippines)
- 17 : 50 ~ 19 : 50 **Symposia 1 : Challenge to 3D Root Canal by CT and Microscope**  
 Chairperson Kiyoshi Matsushima (Nihon University)
- SY.1 Challenge of Endodontic Surgery Using CBCT and Microscope**  
 Bertrand Khayat (Private Practice, France)
- SY.2 New technology in Endodontic Education**  
 Eric Herbranson (Private Practice, USA)

**Room 2**
**5F Hall B5 (1)**

- 12 : 15 ~ 13 : 00 **Lunch Lecture 1 : The Self-Adjusting File (SAF) : a Gate to 3D Endodontic Treatment**  
 Zvi Metzger (Tel Aviv University, Israel)  
 Co-Sponsored by OSADA ELECTRIC CO., LTD.
- 14 : 40 ~ 17 : 40 **Country Representative Speakers 2**  
 Chairpersons Antonio Ginjeira (Universidade de Lisboa, Portugal)  
 Peet van der Vyver (Endodontic Society of South Africa, South Africa)
- CR.5 **Endodontics Through the Looking Glass**  
 Sanjeev Bhandari (British Endodontic Society, UK)
- CR.6 **Outcomes of Endodontic Treatment using Modern Materials and Technology**  
 Gary Hartwell (American Association of Endodontists, USA)
- CR.7 **Pro Evolution 2013 : Shaping and Filling the Canal Space**  
 Antonio Ginjeira (Universidade de Lisboa, Portugal)
- CR.8 **Clinical Management of Blocked/ Calcified Root Canal Systems-Materials and Techniques**  
 Peet van der Vyver (Endodontic Society of South Africa, South Africa)
- 17 : 50 ~ 19 : 50 **Symposia 2 : The Facts and Fictions of Endodontics**  
 Chairperson Hisashi Anan (Fukuoka Dental College)
- SY.3 **Technological and Biological Concepts in Minimally Invasive Endodontics -Safe and Efficient Endodontic Solutions for the Dental Practice-**  
 Dan Fischer (Ultradent Products, Inc., USA)  
 Renato de Toledo Leonardo (Brazilian Society of Endodontics/ University of São Paulo, Brazil)

**Room 3**
**5F Hall B5 (2)**

- 14 : 40 ~ 17 : 40 **Country Representative Speakers 3**  
 Chairperson Sang Hyuk Park (Kyung Hee University, Korea)
- CR.9 **A Diagnosis of Apical Periodontitis : Is Cone Beam CT the Answer?**  
 Chankhrit Sathorn (University of Melbourne, Australia)
- CR.10 **Pain Syndrome as the Complication of Endodontic Treatment**  
 Golovchanska Oleksandra (National O.Bohomolets Medical University, Ukraine)  
 Antonina Politun (Kyiv Medical University of Ukrainian Association of Folk Medicine, Ukraine)
- CR.11 **Withdrawn**  
 Manoel Eduardo de Lima Machado (Brazilian Endodontics Society, Brazil)
- CR.12 **Cryopreservation of the Teeth Affects the Gene Expression from the Human Periodontal Ligament and Pulp Cells**  
 Sang Hyuk Park (Kyung Hee University, Korea)
- 17 : 50 ~ 18 : 35 **Oral Research Presentations 1**  
 Chairperson Yoshitsugu Terauchi (Private Practice, Japan)
- OP.1 **Comparison of Different Apical Sizes on Vapor Lock Effect : an *in-vitro* Study**  
 Ibrahim Ethem Yaylali (Gulhane Medical Academy, Turkey)
- OP.2 **Quality of Root Canal Treatments Performed by Undergraduate Students with Rotary Niti Instruments and Hand Files**  
 Hagay Shemesh (ACTA - Academic Center for Dentistry Amsterdam, The Netherlands)

- OP.3 **The Comparative Study of Learning Effectiveness of Shaping Root Canal with Nickel Titanium Rotary Instruments among Inexperience Users**  
Saisawart-Thongsuphan (Rangsit University, Thailand)
- 18 : 35 ~ 19 : 50 **Oral Research Presentations 2**  
Chairperson Noriyasu Hosoya (Tsurumi University, Japan)
- OP.4 **Effect of Passive Ultrasonic Irrigation (PUI) and Manual Dynamic Irrigation (MDI) on Smear Layer Removal from Root Canals in a Closed Apex in Vitro Model**  
Syed Mukhtar -Un-Nisar Andrabi (Aligarh Muslim University, India)
- OP.5 **Basic Study on the Effectiveness for Root Canal Treatment with the New Prototype Caries Removal Reagent**  
Yoshishige Yamada (Showa University, Japan)
- OP.6 **Photodynamic Therapy vs. Ultrasonic Irrigation : Interaction with Endodontic Microbial Biofilm. An Ex Vivo Study.**  
Etienne Medioni (Dental Faculty of Nice, Oral Health and Aging Laboratory- URE 01, France)
- OP.7 **Smear Layer Removal Efficacy of Different Irrigation Techniques**  
Burcu Serefoglu (Ege University, Turkey)
- OP.8 **Functional Space for Hydrodynamic Fluid Movement in Rat Dentinal Tubules**  
Hideharu Ikeda (Tokyo Medical and Dental University, Japan)

Room 4

5F G510

- 14 : 40 ~ 16 : 10 **Free Lectures 1 : Accident Recovery**  
Chairperson Masamitsu Kawanami (Hokkaido University, Japan)
- FL.1 **Can Apical Periodontitis be Considered an Initial Cause of Cardio-Vascular Disease?**  
Elisabetta Cotti (University of Cagliari, Italy)
- FL.2 **Broken Instrument Removal with a New System**  
Yoshitsugu Terauchi (Intelligent Medical Corporation, Japan)
- FL.3 **Saving Hopeless Teeth**  
Hiroyasu Yoshimatsu (Yoshimatsu Dental Clinic, Japan)
- 16 : 20 ~ 18 : 20 **Free Lectures 2 : Advanced Endodontics 1**  
Chairperson Yasushi Furuichi (Health Sciences University of Hokkaido, Japan)
- FL.4 **Presence of Intra and Extra-radicular Bacteria as a Cause of Endodontic Disease Identified by Various Microscopic Techniques**  
David E. Jaramillo (Loma Linda University, USA)
- FL.5 **Interaction between Immune System and Mesenchymal Stem Cells in Endodontic Pathoses and Clinical Relevance**  
Julian G. Leprince (Universite Catholique de Louvain, Belgium)
- FL.6 **From Root Fracture to Implant-Supported Crown. 15-Years Follow-Up of Straumann Implants in Periodontitis Patients**  
Patrick Andre Adriaens (Intern. Ctr. Periodontology & Oral Implants, Belgium)
- FL.7 **Pulp Revascularization Technique for Immature Teeth**  
Norihiro Sawada (Sawada Dental Office, Japan)
- 18 : 30 ~ 20 : 00 **Free Lectures 3 : Advanced Endodontics 2**  
Chairperson Yuichi Kimura (Ohu University, Japan)
- FL.8 **Examination, Diagnosis and Management of Non-odontogenic Toothache : Introduction of Clinical Practice Guideline**  
Yoshizo Matsuka (University of Tokushima, Japan)

- FL.9 **Dentin Strain Produced by Root-end Cavity Preparation using Er:YAG Laser**  
Satoshi Watanabe (Tokyo Medical and Dental University, Japan)
- FL.10 **Is Endodontic Treatment Possible for HIV Positive Patients?**  
Grace Virginia Gumuruh (Padjajaran University, Indonesia)

### Saturday, May 25

Room 1	4F Hall C
8 : 30 ~ 10 : 30	<b>Symposia 3 : Endodontic Retreatment - Endodontic Disinfection : Active Irrigation Disinfection</b> Chairperson Nobuyuki Tani-Ishii (Kanagawa Dental University, Japan) SY.4 <b>Endodontic Disinfection : Tsunami Irrigation</b> Clifford J. Ruddle (Santa-Barbara, USA) SY.5 <b>Taking the Difficulty out of Endodontic Treatment : Do It Scientifically Simple</b> Sergio Kuttler (Nova Southeastern University, USA)
10 : 50 ~ 12 : 00	<b>Keynote Lecture 3</b> Chairperson Sung Kyo Kim (IFEA Secretary) KL.3 <b>Retreatment, in the Era of Implants?!</b> Shimon Friedman (University of Toronto, Canada)
12 : 15 ~ 13 : 00	<b>Lunch Lecture 2 : 3-D Root Canal Treatment using Forth Generation Niti Rotary Files</b> Toshihiro Ushikubo (U'z Dental Clinic) Co-Sponsored by Yoshida Dental Trade Distr. Co., Ltd/ SybronEndo
13 : 10 ~ 14 : 20	<b>Keynote Lecture 4</b> Chairperson Mark F. Wotzke (IFEA Treasurer) KL.4 <b>Reutilization of the Natural Teeth; Replantation and Auto-Transplantation</b> Seung-Jong Lee (Yonsei University, Korea)
14 : 30 ~ 16 : 45	<b>Country Representative Speakers 4</b> Chairpersons Iris Slutzky-Goldberg (Hebrew University, Israel) Gabriela Martin (Argentinian Endodontic Society, Argentina) CR.13 <b>Histological Findings after the Revascularization Treatment with and without PRP</b> Gabriela Martin (Argentinian Endodontic Society, Argentina) CR.14 <b>Revascularization - Why Not?</b> Iris Slutzky-Goldberg (Hebrew University, Israel) CR.15 <b>Shaping the Future of the Open Apex</b> Antonio Fernando Herrera De Luna (Mexican Association of Endodontists, Mexico)
17 : 00 ~ 19 : 00	<b>Symposia 4 : Micro - Endodontics and Vertical Root Fractures</b> Chairperson Takashi Matsuo (University of Tokushima) SY.6 <b>Ultrasonics and Magnification : a Perfect Marriage</b> Arnaldo Castellucci (University of Florence, Italy) SY.7 <b>Vertical Root Fractures : Their Early Diagnosis and Biomechanics</b> Zvi Metzger (Tel Aviv University, Israel)

- FL.9 **Dentin Strain Produced by Root-end Cavity Preparation using Er:YAG Laser**  
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**Room 2** **5F Hall B5 (1)**

- 8 : 30 ~ 10 : 30 **Symposia 5 : Current Clinical Endodontics - The Treatment Guidelines for Small and Large Lesions -**  
 Chairperson Keiso Takahashi (Ohu University)
- SY.8 **The Treatment Guidelines for Small and Large Lesions**  
 Catherine Ricci (University of Nice Sophia Antipolis, France)
- SY.9 **Diagnosis and Management of Pulpal Disease**  
 Eric W.L. Kwan (University of Alberta, Canada)
- 12 : 15 ~ 13 : 00 **Lunch Lecture 3 : Can Adhesive Approaches Increase Success in Endodontic Clinic ?**  
 Sema Belli (Selçuk University, Turkey)
- Co-Sponsored by SUN MEDICAL CO., LTD
- 14 : 30 ~ 16 : 45 **Country Representative Speakers 5**  
 Chairperson De Moor Roeland (Belgian Association for Endodontics and Traumatology/ Ghent University, Belgium)  
 José Pumarola-Suñé (Spanish Society of Endodontics, Spain)
- CR.16 **Effective Irrigation of the Root Canal System : Sonic and Ultrasonic Activation versus Laser Activated Irrigation or Photon Induced Acoustic Streaming**  
 De Moor Roeland (Belgian Association for Endodontics and Traumatology / Ghent University, Belgium)
- CR.17 **Reaction between Clinically Used Irrigation Solutions and the Effect on Root Canal Treatment**  
 Mohannad Nassar (Jordanian Endodontic Society, Jordan)
- CR.18 **Contemporary Irrigation Efficiency**  
 José Pumarola-Suñé (Spanish Society of Endodontics, Spain)
- 17 : 00 ~ 19 : 00 **Symposia 6 : Dental Pulp Regeneration : from Bench-top to Clinic**  
 Chairperson Hayato Oshima (Niigata University, Japan)
- SY.10 **Recipient-Donor Interaction Affects Dental Pulp Regeneration after Exogenous Stimuli**  
 Hayato Oshima (Niigata University, Japan)
- SY.11 **Origin and Differentiation of Mesenchymal Cells; Dental Pulp Cells**  
 Han-Sung Jung (Yonsei University, Korea)
- SY.12 **Induced Dental Pulp Stem Cells from Dental Pulp Cells**  
 Satoshi Fukumoto (Tohoku University, Japan)

**Room 3** **5F Hall B5 (2)**

- 8 : 30 ~ 10 : 30 **Free Lectures 4 : Diagnosis & Irrigation 1**  
 Chairperson Mikako Hayashi (Osaka University, Japan)
- FL.11 **Treatment of Teeth with Obliterated Root Canals - from Pain to Pleasure**  
 Peter Kiefner (Private Practice, Germany)
- FL.12 **Withdrawn**
- FL.13 **What should We Consider before Initiating the Root Canal Treatment ? From Diagnostic and Therapeutic Point of View**  
 Hiroshi Miyashita (EPSDC, Japan)
- FL.14 **The Power of Bubbles and the Unveiled Mechanisms of Ultrasonic Activated Irrigation**  
 Ricardo Gomes de Macedo (ACTA - Academic Center for Dentistry Amsterdam, The Netherlands)

- 14 : 30 ~ 16 : 45 **Country Representative Speakers 6**  
 Chairpersons Nicholas Paul Chandler (University of Otago, New Zealand)  
 Walid Nehme (St Joseph University, Lebanon)
- CR.19 **Endodontic Surgery; Some Mysteries of Resections, Root-end Fillings and Cavities**  
 Nicholas Paul Chandler (University of Otago, New Zealand)
- CR.20 **Microsurgical Endodontics : Pros and Cons**  
 Ivan N. Vyuchnov II (Endodontology Society of the Russian Dental Association, Russia)
- CR.21 **The Reciprocating Motion : a New Era in Endodontic Instrumentation?**  
 Walid Nehme (St Joseph University, Lebanon)
- 17 : 00 ~ 19 : 00 **Free Lectures 5 : Shaping**  
 Chairperson Masaru Igarashi (Nippon Dental University, Japan)
- FL.15 **Damage to Root Canal Dentine after Endodontic Procedures**  
 Hagay Shemesh (ACTA - Academic Center for Dentistry Amsterdam, The Netherlands)
- FL.16 **Access Preparation "What We Didn't Know Before"**  
 Adham Abdel Azim (University of Tennessee, USA)
- FL.17 **Martensitic Rotary Files : a New Tool to Manage Curved Canals**  
 Diego Barreto Andrade (Columbia University, USA)
- FL.18 **The Reciprocating Motion : a New Era in Endodontic Instrumentation?**  
 Walid Nehme (St Joseph University, Lebanon)

**Room 4**

**5F G510**

- 8 : 30 ~ 9 : 15 **Oral Research Presentations 3**  
 Chairperson Yoshihiko Hayashi (Nagasaki University, Japan)
- OP.9 **The Effectiveness of Adjunctive Hypnotherapy on Anesthesia Achievement in Teeth with Irreversible Pulpitis-Randomized Clinical Trial**  
 Mohsen Ramazani (Mazandaran University of Medical Sciences, Iran)
- OP.10 **Importance of Differential Diagnosis in Keratocystic Odontogenic Tumor**  
 Nobuyuki Kawashima (Tokyo Medical and Dental University, Japan)
- OP.11 **Considering Orthodontic versus Endodontic Treatment in Upper Second Molar Invasion by Upper Third Molar**  
 Akiko Nasu (Nasu Dental Clinic, Japan)
- 9 : 15 ~ 10 : 30 **Oral Research Presentations 4**  
 Chairperson Kiyoshi Matsushima (Nihon University, Japan)
- OP.12 **Finding the Position of a Lateral Canal Based on the Value of Two Electric Current Readings in Vitro**  
 Shigeru Shoji (Tohoku University, Japan)
- OP.13 **Root Form and Canal Morphology of Maxillary Second Premolars in a Northern Chinese Population : a Retrospective Study**  
 Hantang Sun (Fourth Military Medical University, China)
- OP.14 **In Vitro Evaluation of Antimicrobial Activity of Chlorhexidine and Sodium Hypochlorite Irrigant Solutions**  
 Hasanain Hadi Al-khafaji (University of Sharjah, UAE)
- OP.15 **Comparison of the Effect of Benzodiazepine and Hypnotherapy on Stress Management When Performing Root Canal Therapy-In Vivo (Before-After)**  
 Mohsen Ramazani (Mazandaran University of Medical Sciences, Iran)



- OP.16 **Physiotherapeutic Methods in Complex Treatment of Compression Toxic Neuropathy of Inferior Alveolar Nerve**  
Oleksandra Dmytrivna Golovchanska (National O. Bogomoletz Medical University, Ukraine)
- 14 : 30 ~ 15 : 30 **Oral Research Presentations 5**  
Chairperson Tamotsu Tsurumachi (Nihon University, Japan)
- OP.17 **Seminar on the Communication Training Implementation for Faculties in Dental Educational Institutions and a Class in Medical Interview Training on Endodontics for Dental Students**  
Kazuyoshi Suzuki (Aichi Gakuin University, Japan)
- OP.18 **Relationship between the Increase of Interleukin-1 $\beta$  (IL-1 $\beta$ ) Producing Cells and Alveolar Bone Destruction in LPS-induced Periapical Inflammation**  
Dian Agustin Wahjuningrum (Airlangga University, Indonesia)
- OP.19 **Evaluation and Comparison of Polyamide Polymer and Gutta Percha System in Filling Simulated Lateral Canals and Their Homogeneity of Obturation using CBCT an In Vitro Study**  
Arora Shashank (YMT Dental College, Maharashtra University of Dental Sciences, India)
- OP.20 **Withdrawn**
- 15 : 30 ~ 16 : 45 **Oral Research Presentations 6**  
Chairperson Yoshito Yoshimine (Kyushu University, Japan)
- OP.21 **Indications of Root Canal Treatment in Patients Examined at RAKCODS Dental Hospital**  
Ebadullah Raidullah Shafi (RAK College of Dental Sciences, UAE)
- OP.22 **The Influence of Three Different Obturation Techniques towards Percentage Gutta-Percha Filled Area at The Apical**  
Grace Virginia Gumuruh (Universitas Padjajaran, Indonesia)
- OP.23 **In-vitro Analysis of Gutta-percha Removal using Hand Files with Three Solvents**  
Peraya Surapipongpuntr (Naresuan University, Thailand)
- OP.24 **Managing a Cracked Tooth : Considering Fracture Retreatment or Extraction**  
Tsunehiko Nasu (Nasu Dental Clinic, Japan)
- OP.25 **Effects of Simulated Chewing and Access Cavity Design on Strength of Teeth**  
Rada Haddadin (University of Western Australia, Australia)
- 17 : 00 ~ 19 : 00 **Free Lectures 6 : Obturation**  
Chairperson Shogo Takashiba (Okayama University, Japan)
- FL.19 **Successful Endodontics without Obturation? The Hollow-Tube Theory Re-visited**  
Naseem-Shah (All India Institute of Medical Sciences, India)
- FL.20 **Are We Getting Gutta-percha to Move?**  
Benjamin Briseno (Johannes Gutenberg University, Germany)
- FL.21 **Has a New Root Canal Sealer Improved the Seal of the Root Canal System?**  
Toshihiro Ushikubo (U'z Dental Clinic, Japan)
- FL.22 **The Advantages of the Ultrafil System in Achieving Longevity of Endodontic Treatment Results**  
Koichi Yoshikawa (Yoshikawa Dental Clinic, Japan)

- 12 : 00 ~ 13 : 00 Research Posters 1  
Chairperson Hidetoshi Shimauchi (Tohoku University, Japan)
- P.1 Evaluation of Endodontic Digital-text for Clinical Operatory Training  
Jiro Suzuki (Kanagawa Dental University, Japan)
  - P.2 In-depth Morphology Study of Maxillary First Molar Mesiobuccal Root Canal System using Micro-Computed Tomography and Clearing Technique  
Kee-Yeon Kum (Seoul National University School of Dentistry, Korea)
  - P.3 Odontogenic Potential of Human Skeletal Muscle Stem Cells using Decellularized Dental Pulp Matrix  
Rie Kawai (Aichi Gakuin University, Japan)
  - P.4 Micro Morphological Study of Reparative Dentin Induced by Phosphophoryn in Rats  
Toshiyuki Koike (Health Sciences University of Hokkaido, Japan)
  - P.5 Root Canal Treatment of C-shaped Root Canal with Melton's Type I Apex (a Case Report)  
Yoshiko Kawakami (Kagoshima University, Japan)
- 12 : 00 ~ 13 : 00 Research Posters 2  
Chairperson Masataka Yamaguchi (Aichi Gakuin University, Japan)
- P.6 Treatment Outcomes of Endodontically Treated C-shaped Molars : A Retrospective Study  
Jeeraphat Jantararat (Mahidol University, Thailand)
  - P.7 A Case of Maxillary First Molar with Unique Morphology  
Jun Kawamura (Tokyo Medical and Dental University, Japan)
  - P.8 Root Canal Morphology of the Maxillary First Premolars in Libyan Population  
Elham Abdulla Elmsallati (Tripoli University, Libya)
  - P.9 Root Canal Treatment of Maxillary First Premolars with Three Root Canals  
Youn Hee Cho (Kyungpook National University, Korea)
  - P.10 Antibacterial Activity of Chlorhexidine and Hydrogen Peroxide Combination against *Enterococcus faecalis*  
Seyed Mohsen Hasheminia (Isfahan University of Medical Sciences, Iran)
- 12 : 00 ~ 13 : 00 Research Posters 3  
Chairperson Yuichiro Noiri (Osaka University, Japan)
- P.11 Identification of Bacteria from Pulpitis Ascendens  
Rie Fujii (Tokyo Dental College, Japan)
  - P.12 Inactivation of *Enterococcus faecalis* by Homemade Cold Atmospheric-Pressure Plasma Device  
Gin Chen (Taichung Veterans General Hospital, Taiwan)
  - P.13 Antibacterial Effect of Aluminium Chloride against *Enterococcus faecalis* : An in Vitro Study  
Phumisak Louwakul (Chiang Mai University, Thailand)
  - P.14 Cell Proliferation and Differentiation Potential after Treated with Triple Antibiotic Mixtures : an in Vitro Study on Isolated Human Dental Pulp Cells and Apical Papilla Cells  
Panupat Phumpatprakom (Chiangmai University, Thailand)
  - P.15 The Effectiveness of Antibiotics for Intracanal Bacteria Removal using *E. faecalis* Biofilm Model  
Won-Mann Oh (Chonnam National University, Korea)

12 : 00 ~ 13 : 00 Research Posters 4

Chairperson Hidefumi Maeda (Kyushu University, Japan)

- P.16 Time Course Micro-CT Analysis of Periapical Lesions using an Extradicular Biofilm Model in Rat

Katsutaka Kuremoto (Osaka University, Japan)

- P.17 Inflammatory Potential of Primarily Infected Root Canals Content against Macrophages by the Il-  $\beta$  and Tnf-  $\alpha$  Production

Brenda PFA Gomes (State University of Campinas, Brazil)

- P.18 The Antibacterial Effects of Calcium Hydroxide and the Ethanol Extract of Propolis against *Enterococcus faecalis*

Novandyta Hapsari Indra (University of Indonesia, Indonesia)

- P.19 Effects of Nano-bubbles on *Enterococcus faecalis* - Transmission Electron Microscopy Investigation-

Kouichi Henmi (Tokyo Medical and Dental University, Japan)

- P.20 In Vitro Pharmacognostic Potential of Aqueous Barberry Extracts on *Enterococcus faecalis* Biofilm Formation and esp Gene Expression

Maryam Haghighi (University of the East, Philippines)

12 : 00 ~ 13 : 00 Research Posters 5

Chairperson Norihiro Sawada (Sawada Dental Office, Japan)

- P.21 Comparison of Prophylactic Effect of Zintoma and Ibuprofen on Post-endodontic Pain. Double Blind Randomised Clinical Trial

Mohsen Ramazani (Mazandaran University of Medical Sciences, Iran)

- P.22 The Effect of Visual Function under the Operating Dental Microscopes

Akira Mitsuhashi (Kanagawa Dental College, Japan)

- P.23 Transient Receptor Potential Ankyrin 1 (TRPA1) is Involved in the Bradykinin-induced Vasodilatation in the Feline Dental Pulp

Moom Hwan Lee (Kyungpook National University, Korea)

- P.24 The Effect of Glass Ionomer Cement on the Pulp Healing Tested using Alkaline Phosphatase Expression

Endang Suprastiwi (University of Indonesia, Indonesia)

- P.25 Tensile and Tear Properties of Styrenic Thermoplastic Elastomer Rubber Dam Sheet

Kallaya Yanpiset (Mahidol University, Thailand)

12 : 00 ~ 13 : 00 Research Posters 6

Chairperson Osamu Takeichi (Nihon University, Japan)

- P.26 Correlation between Cyclic Fatigue and Bending Property of Profile Endodontic Instruments

Jindan Piao (Tokyo Medical and Dental University, Japan)

- P.27 Gene Expression Analysis of Trypsin, Tumor Necrotic Factor-Alpha (Tnf-Alpha), and Interleukin-4 (Il-4) as Mast Cell Activation Marker in Pulpitis and Necrotic Pulp

Dini Asrianti Bagio (University of Indonesia, Indonesia)

- P.28 Inhibitory Effect of Ameloblastin on Epithelial Cells

Noriko Saitou (Kyushu Dental College, Japan)

- P.29 BMP-1 Promotes CTGF/CCN2 Expression Independently of Protease Activity in Human Carious Teeth

Koichiro Muromachi (Nihon University, Japan)

- P.30 **The Validity of Small Volume Cone-beam Computed Tomography in the Diagnosis and Management of a Case of Vertical Root Fracture**  
Kazuhiko Nakata (Aichi Gakuin University, Japan)
- 12 : 00 ~ 13 : 00 **Research Posters 7**  
Chairperson Arata Ebihara (Tokyo Medical and Dental University, Japan)
- P.31 **Root Canal Morphology of Mandibular Incisor using Micro-focus X-ray CT Device**  
Taro Nishida (Nippon Dental University, Japan)
- P.32 **Usefulness of Cone-beam Computed Tomography for Detecting Periapical Radiolucency**  
Shintaro Uraba (Tokyo Medical and Dental University, Japan)
- P.33 **Effectiveness of CT and MTA for Endodontic Surgery : a Case Report**  
Yu Furuya (Osaka University, Japan)
- P.34 **Detection of the Second Mesiobuccal Canal of Maxillary Molars by Swept-source Optical Coherence Tomography**  
Yoshiko Iino (Tokyo Medical and Dental University, Japan)
- P.35 **Observation of the Pulp Chamber using SS-OCT**  
Toshihiko Yoshioka (Tokyo Medical and Dental University, Japan)
- 12 : 00 ~ 13 : 00 **Research Posters 8**  
Chairperson Yoshito Yoshimine (Kyushu University, Japan)
- P.36 **Morphological Evaluation of Periapical Radiolucency in Three Dimensions using Cone-beam CT**  
Kei Komatsu (Tokyo Medical and Dental University, Japan)
- P.37 **Effect of Motion Artifact on the Quality of Cone-Beam CT Images**  
Atsushi Takeda (Tokyo Medical and Dental University, Japan)
- P.38 **Cemental Tear Confirmed by Exploratory Endodontic Surgery**  
Chizuko Kokuzawa (Tokyo Medical and Dental University, Japan)
- P.39 **Mandibular Incisors with a Large Periapical Lesion Diagnosed and Followed up by CBCT**  
Takamori Yamauchi (Tokyo Medical and Dental University, Japan)
- P.40 **Reverse Engineering Iontophoresis**  
Keisuke Kanehira (Kanehira Dental Office, Japan)
- 12 : 00 ~ 13 : 00 **Research Posters 9**  
Chairperson Noriko Mutoh (Kanagawa Dental University, Japan)
- P.41 **The Analgesic Effect of Nonsteroidal Anti-inflammatory Drugs (NSAIDs) to Odontogenic Pain -Establishment of Quantitative Criterion-**  
Reiko Wadachi (Tokyo Medical and Dental University, Japan)
- P.42 **A Combined Medical and Dental Treatment Approach in a Case of Intractable Disease**  
Satoshi Sugimoto (Sugimoto Dental, Japan)
- P.43 **Preoperative and In-treatment Factors for the Prognosis of Intentional Replantation**  
Sin-Yeon Cho (Yonsei University Dental Hospital, Korea)
- P.44 **Cell Dynamics in the Process of Pulpal Healing following Tooth Transplantation**  
Noriko Mutoh (Kanagawa Dental University, Japan)
- P.45 **Effect of Zinc Stearate on Dentin Hypersensitivity**  
Akiyuki Morito (Tsurumi University School of Dental Medicine, Japan)

12 : 00 ~ 13 : 00 Research Posters 10

Chairperson Nobuyuki Kawashima (Tokyo Medical and Dental University, Japan)

- P.46 **Shear Bond Strength of Glass Ionomer Cements and Resin Modified Glass Ionomer Cements on Artificially Affected Dentin**  
Devy Noviana Djakaria (FKG UI, Indonesia)
- P.47 **Root-end Restoration using MTA against the Intractable Cases of Root Canal Treatment**  
Kayoko Kitajima (Nippon Dental University, Japan)
- P.48 **Calcium Ions Released from Mineral Trioxide Aggregate Convert the Differentiation Pathway of C2C12 Cells into Osteoblast Lineage via the L-type Voltage-dependent Calcium Channel**  
Makoto Hayashi (Nihon University, Japan)
- P.49 **Immunohistochemical Analysis of CD163-expressing Macrophages in Mineral Trioxide Aggregate-applied Rat Subcutaneous Tissue**  
Takafumi Ito (Niigata University, Japan)
- P.50 **Regeneration of Dental Pulp Tissue in Immature Dog Teeth with Apical Periodontitis using Platelet Rich Plasma and Dental Pulp Stem Cells**  
Xiaofei Zhu (Peking University, China)
- P.51 **Development of Fine Apatite/Collagen Composite for Apical Barrier Material**  
Satoshi Kawano (Asahi University, Japan)

12 : 00 ~ 13 : 00 Research Posters 11

Chairperson Noriyuki Suzuki (Tokyo Medical and Dental University, Japan)

- P.52 **Canal Length Change between Pre-instrumentation and Post-instrumentation**  
Jaeman Lim (Yonsei University, Korea)
- P.53 **Comparative Evaluation of New and Old ProTaper F3 Instruments using Physico-mathematical Analysis**  
Evgeny Rzhanov (Moscow State University of Medicine and Dentistry, Russia)
- P.54 **Phase Transformation Behavior and Bending Properties of Newly Designed Shape-memorized Nickel-Titanium Rotary Endodontic Instruments**  
Yoshio Yahata (Showa University, Japan)
- P.55 **Cyclic Fatigue Measurement of Different NiTi Rotary Files on Three Different Artificial Canals**  
Hiroaki Watanabe (Tokyo Dental College, Japan)
- P.56 **ProTaper FHU Versus Stainless Steel Hand Instruments in Overall Treatment Quality - Students' Perspective**  
Rong Hua, Christine Chen (National University of Singapore, Singapore)

12 : 00 ~ 13 : 00 Research Posters 12

Chairperson Yuichi Kimura (Ohu University, Japan)

- P.57 **In Vitro Comparison of Fracture Resistance of Endodontically Treated Tooth after Mechanical Instrumentation with Different Master Apical File Size**  
Pavepong Tanompetsanga (Rangsit University, Thailand)
- P.58 **Cyclic Fatigue Analysis of iRaCe Sequence (FKG Dentaire, La Chaux de Fonds, Switzerland) in Extracted Human Teeth, Based on a Destructive Testing Lab**  
Marcelo Rolla (Brazilian Air Force, Brazil)
- P.59 **Evaluation of the Effect of Root Canal Preparation Size and Flaring on the Depth of Irrigant Penetration**  
Hussain Faisal Al-Huwaizi (University of Baghdad, Iraq)

- P.60 **Prevention of Parachloroaniline Precipitation in Simulated Lateral Canals during Final Rinse of Endodontic Treatment : An *in-vitro* study**  
Ibrahim Ethem Yaylali (Gulhane Medical Academy, Turkey)
- P.61 **Removal of Chlorhexidine Gel from Simulated Root Canal Irregularities : an *in-vitro* Study**  
Yasar Meric Tunca (Gulhane Medical Academy, Turkey)
- P.62 **Effectiveness of 10% Citric Acid and 95% Alcohol on Para-chloroaniline Precipitate, a Leakage Study**  
Jaruma Beau Sakdee (Srinakharinwirot University, Thailand)
- 12 : 00 ~ 13 : 00 **Research Posters 13**  
Chairperson Kunihiro Yoshida (Niigata University, Japan)
- P.63 **Analysis of Cytotoxic Mechanism of Hypochlorous-acid Electrolyzed Water**  
Yuki Ide (Meikai University, Japan)
- P.64 **SEM Observations of Dentin Walls Treated with Endodontic Agents after Retropreparation**  
Kyoko Arai (Nippon Dental University, Japan)
- P.65 **A Comparative Study of Contact Angles and Penetration of Different Concentrations of Cetrimide Mixed in EDTA**  
Thanida Poonyarit (Chiangmai University, Thailand)
- P.66 **Comparison of the Removal Techniques of Calcium Hydroxide from Root Canals**  
Yoko Ogura (Nippon Dental University, Japan)
- P.67 **Management of Complicated Crown Fractures on Anterior Teeth Caused by Traumatic Injury**  
Nanik Zubaidah (Airlangga University, Indonesia)
- P.68 **Assessment of Apical Leakage of Different Endodontic Sealers using a New Method for the Leakage Measurement (In vitro study)**  
Masoud Khoory (Ajman University of Science & Technology, UAE)
- 12 : 00 ~ 13 : 00 **Research Posters 14**  
Chairperson Kan-ichi Nakagawa (Pacific Endodontic Research Foundation JAPAN, Japan)
- P.69 **Physical Properties of New Root Canal Sealer Including Oleic Acid and Low Concentration of Eugenol**  
Munehiro Maeda (Nippon Dental University, Japan)
- P.70 **Sealing Ability of S-PRG Filler-containing Root Canal Sealer in Five-year Water Storage**  
Tomohide Ueyonahara (Health Sciences University of Hokkaido, Japan)
- P.71 **The Polymerization Rate of Sealers**  
Hitoshi Sakaue (Showa University, Japan)
- P.72 **Effect of Canal Taper and Plugger Size on Warm Gutta-percha Obturation of Lateral Depressions**  
Hisashi Suguro (Nihon University, Japan)
- P.154 **Non-surgical Microscopic Approach of Endodontic Hopeless Teeth : Case Report**  
Kan-ichi Nakagawa (Pacific Endodontic Research Foundation JAPAN, Japan)
- 12 : 00 ~ 13 : 00 **Research Posters 15**  
Chairperson Toshiko Ozawa (Tsurumi University, Japan)
- P.73 **Contributions of Microstructures and Compositions to Mechanical Properties of Dentin**  
Yuko Takeda (Osaka University, Japan)

- P.74 **A Clinical Survey Concerning Cracks and Fractures of Vital Teeth**  
Miki Ichimaru (Kyushu Dental College, Japan)
- P.75 **The Use of Physics Forceps in Intentional Replantation : a Case Report**  
Bohoon Kim (Pusan National University, Korea)
- P.76 **Retreatment of Mandibular Molar Tooth with Vertical Root Fracture**  
Hicran Donmez (Ege University, Turkey)
- P.77 **Surgical Endodontic Treatment of the Central Incisor Infected by Lateral Canal : a Case Report**  
Jungmin Lee (Kyung Hee University, Korea)

**Clinical Case Presentation Room**

**7F Hall B7**

- Chairpersons Yoshifumi Kinomoto (Kinomoto Dental Office/ Osaka University, Japan)  
Yoshihiko Hayashi (Nagasaki University, Japan)  
Shu Abe (Heiwa Dental Clinic, Japan)  
Keiso Takahashi (Ohu University, Japan)  
Hideki Okumura (Okumura Dental Clinic, Japan)  
Yasuhisa Tsujimoto (Nihon University, Japan)  
Gin-ichiro Hata (Osaka Dental University, Japan)  
Shigeru Shoji (Tohoku University, Japan)

**12 : 15 ~ 12 : 25 Clinical Case Presentations 1**

- CC.P.1 **Three-rooted Mandibular First Molar (Radix Entomolaris) : Three Case Reports**  
Taha Ozyurek (Ondokuz Mayıs University, Turkey)
- CC.P.2 **A Case of Mandibular First Premolar with Four Root Canals**  
Tomoji Hirose (Ai Dental Clinic, Japan)
- CC.P.3 **Anatomical Study on the Root Apex**  
Tadashi Mizutani (Mizutani Dental Clinic, Japan)
- CC.P.4 **Single Visit Endodontic Treatment with Direct Cuspal Coverage Restoration in Left Mandibular First Molar**  
Christine Hendriono (Trisakti Dental University, Indonesia)
- CC.P.5 **Dental Amalgam Restoration Associated Oral Lichenoid Reaction**  
Elizabeth Fitriana Sari (Universitas Padjajaran, Indonesia)
- CC.P.6 **Consideration of the Arrangements about the Fiber-reinforced Composite Resin Post & Core**  
Katsuyuki Atsumi (Dental Clinic K, Japan)
- CC.P.7 **Endodontics for Refractory Apical Periodontitis**  
Katsunori Kunoki (Kunoki Dental Clinic, Japan)
- CC.P.8 **Withdrawn**

**12 : 25 ~ 12 : 35 Clinical Case Presentations 2**

- CC.P.9 **A Case Series Associated with Endo-perio Lesions**  
Hacer Aksel (Hacettepe University, Turkey)
- CC.P.10 **Conventional Endodontic Treatment for Tooth with Endodontic-Periodontic Lesion (a Case Report)**  
Diani Prisinda (Padjadjaran University, University of Indonesia, Indonesia)
- CC.P.11 **Conventional Endodontic Treatment In Endo-Perio Lesions**  
Shalina Ricardo (University of Indonesia, Indonesia)
- CC.P.12 **Treatment of Fused Maxillar Central Incisor with Supernumeray Tooth**  
Yagmur Yalcin (Istanbul University, Turkey)

- CC.P.13 **Management of Intrusive Luxation : a Case Series**  
Vijay Kumar (All India Institute of Medical Sciences, India)
- CC.P.14 **Reimplantation of Endodontically Treated Upper Canine with Cervical Root Fracture**  
Tugba Turk (Ege University, Turkey)
- CC.P.15 **Repair of Furcation Perforation with Mineral Trioxide Aggregate (MTA) (Two Case Reports)**  
Ratna Indriutami (University of Indonesia/ Cipto Mangunkusumo Hospital, Indonesia)
- CC.P.16 **Non Surgical Endodontic Retreatment of Multiple Perforation and Open Apex Cases Successfully Retreated with MTA using Endo Microscope with Good Bone Healing**  
Lom Harshan Simlote (University of the East, Philippines)

12 : 35 ~ 12 : 45 **Clinical Case Presentations 3**

- CC.P.17 **Root Dilaceration and Oblique Root Fracture of Upper Left Canine after Trauma : a Case Report**  
Taha Ozyurek (Ondokuz Mayıs University, Turkey)
- CC.P.18 **Root Canal Treatment on Large Periapical Lesion**  
Afriani Nov Angellina Sagala (Universitas Indonesia, Indonesia)
- CC.P.19 **Revascularization of Immature Permanent Teeth with Apical Lesion**  
Shin-ichi Iwaya (Iwaya Dental Clinic, Japan)
- CC.P.20 **Effective Treatment Protocol for the Endodontic Resurgery : a Case Report**  
Kenji Yoshida (Fukunishi Dental Clinic, Japan)
- CC.P.21 **Evaluation of Electronics Methods to Determine the Working Length**  
Carlos Menezes Aguiar (Universidade Federal de Pernambuco, Brazil)
- CC.P.22 **For Safe and Assured Endodontic Treatment using –JH-endo System–**  
Akihito Yamauchi (Cocolo Dental Clinic, Japan)
- CC.P.23 **Adhesion of Fiber Post & Core**  
Yasuo Fukuchi (Fukuchi Dental Office, Japan)
- CC.P.24 **A Case of Occlusal Reconstruction using Transplantation and Implant**  
Syogo Shioji (Union Dental Clinic, Japan)

12 : 45 ~ 12 : 55 **Clinical Case Presentations 4**

- CC.P.25 **Managing Long Standing Furcation Perforation. An Innovative Approach**  
Adham Abdel Azim (University of Tennessee, USA)
- CC.P.26 **Withdrawn**
- CC.P.27 **Removal of a Separated File in a Three-rooted Mandibular First Molar : a Case Report**  
Taha Ozyurek (Samsun Ondokuz Mayıs University, Turkey)
- CC.P.28 **Management of an Internal Root Resorption of Maxillary Right Lateral Incisor**  
Burcu Serefoglu (Ege University, Turkey)
- CC.P.29 **Management of Perforating Internal Resorptive Defect with Mineral Trioxide Aggregate : a Case Report**  
Lom Harshan Simlote (University of the East, Philippines)
- CC.P.30 **Treatment of Root Resorptions with MTA : Case Report**  
Yagmur Yalcin (Istanbul University, Turkey)
- CC.P.31 **Efficacy of the Micro-Apical Placement System for Root-end Filling using Mineral Trioxide Aggregate**  
Kazuhiro Fukunishi (Fukunishi Dental Clinic, Japan)



Sunday, May 26

**Room 1** **4F Hall C**

- 9 : 00 ~ 10 : 30 **Symposia 7 : Aging and Anti-aging Medicine for Dentistry in Japan**  
 Chairperson Hidetoshi Shimauchi (Tohoku University, Japan)
- SY.13 **Recent Advances in Anti-aging Medicine**  
 Ichiro Saito (Tsurumi University, Japan)
- SY.14 **Responses, Regeneration and Aging of Dentin-Pulp Complex**  
 Masaki Shimono (Tokyo Dental College, Japan)
- 10 : 50 ~ 12 : 50 **Symposia 8 : The Future Dentistry Based on Endodontics - Restorative Dentistry - Endodontics -**  
 Chairperson Hidemi Kurihara (Hiroshima University, Japan)
- SY.15 **Vital Pulp Therapy - Biological Basis, Current Concepts and Future Perspectives**  
 Takashi Okiji (Niigata University, Japan)
- SY.16 **Tissue Regeneration for Periapical Defects and Periodontal Defects**  
 Hidemi Kurihara (Hiroshima University, Japan)
- SY.17 **Photofunctionalization-driven Next Generation Implant and Tissue Regenerative Therapy - What Is Implant on Future Endodontics**  
 Takahiro Ogawa (UCLA, USA)
- SY.18 **Relationship between Orthodontic Therapy and Endodontic Therapy : Orthodontic Therapy in Conjunction with Auto-transplantation of Root-Incomplete Teeth**  
 Ryuzo Kanomi (Kanomi Dental Office, Japan)
- 14 : 00 ~ 17 : 00 **Country Representative Speakers 7**  
 Chairpersons Nobuyuki Tani-Ishii (Kanagawa Dental University, Japan)  
 Wayne Pulver (Canadian Academy of Endodontics, Canada)
- CR.22 **Endodontic Retreatment with Mineral Trioxide Aggregate**  
 Nobuyuki Tani-Ishii (Kanagawa Dental University, Japan)
- CR.23 **Evaluation of the Efficacy of Different Systems for Gutta-percha Removal in Root Canal Retreatment**  
 Shalini D. Aggarwal (Indian Endodontic Society, India)
- CR.24 **The Use of Bioceramic Technology as an Endodontic Sealer**  
 Wayne Pulver (Canadian Academy of Endodontics, Canada)
- CR.25 **Lasers in Endodontics : Is Their Future Coming Closer?**  
 Eleftherios-Terry Farmakis (University of Athens, Greece)
- 17 : 00 ~ 17 : 30 **Closing Ceremony**

**Room 2** **5F Hall B5 (1)**

- 9 : 00 ~ 10 : 30 **Symposia 9 : The Role of Dentist in Case of Great Disaster - Identification of Bodies Based on Endodontics in the Great East Japan Earthquake**  
 Chairperson Hiroshi Nakamura (Aichi Gakuin University, Japan)
- SY.19 **Close Relationship of the Forensic Dentistry with the Endodontics**  
 Takao Hatori (Kobayashi Hospital/ Odawara Dental Association, Japan)
- SY.20 **Databases of Dental Findings for Contributing to Identification After a Massive Disaster**  
 Tadahiro Yanagawa (Japan Dental Association, Japan)

14 : 00 ~ 17 : 00 **Country Representative Speakers 8**  
 Chairpersons Piyanee Panitvisai (Chulalongkorn University, Thailand)  
 Baybora Kayahan (Turkish Endodontic Society, Turkey)

- CR.26 **Withdrawn**  
 Mohammad Hossein Nekoofar (Iranian Association of Endodontists, Iran)
- CR.27 **Broken Instruments : Prevention and Removal**  
 Baybora Kayahan (Turkish Endodontic Society, Turkey)
- CR.28 **Consideration for Restoration of Endodontically Treated Teeth**  
 Piyanee Panitvisai (Chulalongkorn University, Thailand)

Room 3

5F Hall B5 (2)

9 : 00 ~ 10 : 30 **Oral Research Presentations 7**

Chairperson Keiso Takahashi (Ozu University, Japan)

- OP.26 **Mutation Analysis of *Enterococcus faecalis* Resistance Genes Induced by Intracanal Medicament**  
 Prathyusha Francis (University of the East, India)
- OP.27 **Profiling of Cytokine Production in Exudative Fluids from Various Periapical Lesions for Establishment of Novel Treatment Strategy**  
 Kazuhisa Ouhara (Hiroshima University, Japan)
- OP.28 **An Ex vivo Evaluation of Bacterial Biofilm Removal using Static and Passive Ultrasonic Irrigation Methods**  
 Joseph Joy (Private Practice Limited to Endodontics, India)
- OP.29 **Molecular Assessment of Bacterial Community in Persistent Apical Periodontitis Granulomatous Tissue : 16S rDNA Clone Library Analysis**  
 Myrna Nurlatifah Zakaria (Kyushu University, Japan)
- OP.30 **A Potential Antibacterial Active Compound 18-h-1 of Myrmecodia Pendens Merr. & Perry against *Enterococcus faecalis* ATCC 29212 in Comparison to 3% NaOCl and 2% Chlorhexidine**  
 Hendra Dian Adhita Dharsono (Universitas Padjadjaran, Indonesia)
- OP.31 **Antimicrobial Efficacy of Photo Activated Disinfection Alone and in Combination with Calcium Hydroxide or Triple Antibiotic Paste : a Clinical Study**  
 Pragma Mishra (All India Institute of Medical Sciences, India)

10 : 50 ~ 12 : 50 **Free Lectures 7 : Diagnosis & Irrigation 2**

Chairperson Yasuhisa Tsujimoto (Nihon University, Japan)

- FL.23 **Irrigation of the Root Canal System : Efficacy of a New Laser Technique PIPS (Photon-induced Photoacoustic Streaming) Compared to Conventional Irrigation and Passive Ultrasonic Irrigation**  
 David E. Jaramillo (Loma Linda University, USA)
- FL.24 **Influence of Instrumentation on Biomechanical Properties of the Teeth**  
 Michael Solomonov (Tel Hashomer Hospital, Israel)
- FL.25 **Efficacy of Irrigants on Biofilms in Endodontic Treatment**  
 Mohamed Salah Zeglam (Tripoli University, Libya)
- FL.26 **A Survey on Usage of Cone Beam Computed Tomography for Endodontic Diagnosis**  
 Arata Ebihara (Tokyo Medical and Dental University, Japan)

14 : 00 ~ 15 : 30 **Free Lectures 8 : Retreatment 1**

Chairperson Kunihiro Yoshida (Niigata University, Japan)

- FL.27 **Withdrawn**

- FL.28 "Flare-up" Can We See It Coming?  
Adham Abdel Azim (University of Tennessee, USA)
- FL.29 Successful Endodontic Re-treatment  
Morio Okaguchi (Okaguchi Dental Clinic, Japan)
- 15 : 30 ~ 17 : 00 Free Lectures 9 : Retreatment 2  
Chairperson Hiromichi Yumoto (The University of Tokushima, Japan)
- FL.30 Endodontic Retreatment : Decision Making  
Jamal Mustafa El-swiah (Benghazi University, Libya)
- FL.31 A Microsurgical Approach to Maxillary Molar Retreatment  
Tsuneyasu Izawa (Izawa Dental Office, Japan)
- FL.32 The Use of Watermelon Frost as Root Canal Medicament in Non-surgical Retreatment with Periapical Lesion of C-shaped Mandibular Second Molar : a Case Report  
Dennis Dennis (University of Sumatera Utara, Indonesia)

Room 4

5F G510

- 9 : 00 ~ 10 : 30 Oral Research Presentations 8  
Chairperson Hiroshi Miyashita (Endo Perio Specialist's Dental Clinic, Japan)
- OP.32 Near Infrared Laser Induced Photo-acoustic Streaming for Endodontic Applications  
Roy George (School of Dentistry and Oral Health, Australia)
- OP.33 Comparison of the Cyclic Fatigue Resistance of Nickel-Titanium Instruments used in Reciprocating or Continuous Rotary Motion  
Peter Kiefner (Private Practice, Germany)
- OP.34 Micro CT Analysis of Hard Tissue Debris Accumulation Created by SAF vs ProTaper Systems  
Diyar Khalid Bakr (Hawler Medical University, Iraq)
- OP.35 Development of a Low Cost and High-resolution Fiber Scope for Endodontics  
Shinji Yoshii (Kyushu Dental College, Japan)
- OP.36 Selective Penetration of Conventional and Experimental Nano-filled Epoxy Resin-based Sealer Cements into Dentinal Tubules : SEM and EDS Analysis  
Epita Sarah Pane (University of Melbourne, Australia)
- OP.37 Ionic Release and Apatite Formation of New Injectable and Fast Setting versus Conventional Calcium Silicate-based Cements  
Hugo Setbon (Universite Catholique de Louvain, Belgium)
- 10 : 50 ~ 11 : 50 Oral Research Presentations 9  
Chairperson Yoshifumi Kinomoto (Kinomoto Dental Office/ Osaka University, Japan)
- OP.38 The Effect of Various Concentrations of Iodine Potassium Iodide on the Antimicrobial Properties of Mineral Trioxide Aggregate  
Saatchi Masoud (Isfahan University of Medical Sciences, Iran)
- OP.39 Comparison of Coronal Sealing Ability of a New Endodontic Material (CEM Cement), Glass Ionomer, and Mineral Trioxide Aggregate as Coronal Barrier in Non-vital Bleaching - in Vitro  
Mohsen Ramazani (Mazandaran University of Medical Sciences, Iran)
- OP.40 Assessment of Coronal Leakage Resistance of a New MTA-based Sealer in Comparison with That of AH Plus Sealer - in Vitro  
Mohsen Ramazani (Mazandaran University of Medical Sciences, Iran)

- OP.41 H.K. Tweezers (MTA Cement Carrying, Reverse Root Canal Plugger Tweezers for Post Apicoectomy)  
Hitoshi Kurihara (Chichibu Rinsyou Dental Clinic CTImplant Center, Japan)
- 11 : 50 ~ 12 : 50 **Oral Research Presentations 10**  
Chairperson Mikako Hayashi (Osaka University, Japan)
- OP.42 Effect of Calcium Silicate-based Cements on the Osteoblastic Differentiation  
Bin-Na Lee (Chonnam National University, Korea)
- OP.43 The Inflammatory Reaction of Pulp Tissue with Calcium Hydroxide, MTA and Portland Cement (in Vivo)  
Hesti Witasari Jos Erry (University of Indonesia, Indonesia)
- OP.44 Comparative Evaluation of the Push Out Bond Strength of Three Commercially Available CSMs Used as Furcation Repair Material in the Presence of Blood Contamination. An invitro study.  
Sanjay Miglani (Jamia Millia Islamia University, India)
- OP.45 Evaluation of Irradiative Abilities of Dental Materials  
Oleksandra Dmytrivna Golovchanska (National O. Bogomoletz Medical University, Ukraine)
- 14 : 00 ~ 15 : 15 **Oral Research Presentations 11**  
Chairperson Tomoatsu Kaneko (Niigata University, Japan)
- OP.46 Down-regulation of Inflammatory Mediator Synthesis and Infiltration of Immunocompetent Cells in Rat Experimental Pulpitis by MMP-3  
Koyo Takimoto (Tokyo Medical and Dental University, Japan)
- OP.47 3-D Spheroid Culture Method Promotes Odonto-/Osteo-blastic Differentiation of Dental Pulp Cells  
Mioko Yamamoto (Tokyo Medical and Dental University, Japan)
- OP.48 The Activation/Maturation of Macrophages in Engineered Pulp Tissue  
Tomoatsu Kaneko (Niigata University, Japan)
- OP.49 ATF6 Involved in the Tooth Development and Odontoblast Differentiation  
Yun-Chan Hwang (Chonnam National University, Korea)
- OP.50 TRAF6 Performs a Vital Role in Bone Resorption during *E. Faecalis* Infected Periapical Periododontitis  
Niu Weidong (Dalian Medical University, China)
- 15 : 15 ~ 16 : 30 **Oral Research Presentations 12**  
Chairperson Hideki Shiba (Hiroshima University, Japan)
- OP.51 Suppressive Regulation of Bone Destruction in Rat Periapical Lesions by Cathepsin K Inhibitor  
Noriyuki Suzuki (Tokyo Medical and Dental University, Japan)
- OP.52 The Antimicrobial Peptide LL37 Suppresses the Peptidoglycan-induced mRNA Expression of Matrix Metalloproteinases in Human Pulp Cells  
Rathvisal Khung (Hiroshima University, Japan)
- OP.53 Effect of Different Irrigation Solutions on the Inhibition of Matrix Metalloproteinases 2 and 9  
Tugba Turk (Ege University, Turkey)
- OP.54 Withdrawn
- OP.55 Beta-2 Adrenoreceptor Immunoreactivity in the Odontoblastic Layer of Human Dental Pulp  
Jie Gu (Tokyo Medical and Dental University, Japan)

## Poster Sessions

7F Hall B7

13 : 00 ~ 14 : 00 Research Posters 16

Chairperson Toshiko Ozawa (Tsurumi University, Japan)

- P.78 **Comparative Evaluation of Chelating Ability of Edta and Glda on Root Canal Surface - an in Vitro Study**  
Lom Harshan Simlote (University of the East, Philippines)
- P.79 **Behavior Analysis of Root Canal Irrigant using Computational Fluid Dynamics (CFD) in Apical Negative Pressure Irrigation Technique**  
Kazuto Furuhashi (Tokyo Medical and Dental University, Japan)
- P.80 **The Treatment Outcomes of Root Perforations : Retrospective Study**  
Titalee Jirathanyanatt (Mahidol University, Thailand)
- P.81 **Withdrawn**
- P.82 **Development and Improvement of Cast Post Removing Instrument (Post and Core Remover)**  
Hidekazu Konishi (Ouki Dental Clinic, Japan)

13 : 00 ~ 14 : 00 Research Posters 17

Chairperson Takashi Matsuo (University of Tokushima, Japan)

- P.83 **Apical Root Surface Organ Transformation of the Intractable Origin of Endodontic Lesion by SEM-EDX**  
Atusi Ookubo (Nihon University, Japan)
- P.84 **Investigation on Factors Causing Refractory Periapical Periodontitis in General Practices**  
Mikiyo Yamaguchi (Osaka University, Japan)
- P.85 **The Comparative Study of Various Solvent to Remove Parachloroaniline in Root Canal**  
Roongrawee Kamolroongwarakul (Mahidol University, Thailand)
- P.86 **Non-surgical Endodontic Treatment Approach of Large Cyst-like Periapical Lesions**  
Ga Eun Son (Kyoungpook National University, Korea)
- P.87 **Microbiological Diversity of Endodontic Treatment Failures by Clonal Analysis**  
Ericka Tavares Pinheiro (University of Sao Paulo, Brazil)

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