

Curriculum Vitae

Hagay Shemesh, DMD, PhD
UHD, Dep. Of Endodontology, ACTA

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Hagay Shemesh
Division of endodontology
Academic Centre for Dentistry Amsterdam (ACTA)
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Personal details

Date of birth: 8.9.1966
Place of birth: Tel Aviv, Israel
Nationality : Dutch

Immigration to the Netherlands: February 2002
Dutch nationality after naturalization process: 2008

Academic appointment:

Associate professor (U.H.D) 2014-now

Education & work

- 1989: DMD degree (Doctor of Dental Medicine) – Hebrew University, Jerusalem, Israel
- 1990-1995: Army service- Israeli Airforce, Dental unit management
- 1996-1999: Post-graduate program in Endodontology, Hebrew University Jerusalem
- 2000: Israeli boards / specialist certificate endodontology, ministry of health
- 2000-2002: Work in private practice limited to endodontology in Tel Aviv
- 2002: Immigration to the Netherlands
- 2002-2006: Staff of the department of endodontology in ACTA- Undergraduate teaching
- 2006-2009: PhD thesis: “new insights into the root canal wall” (www.shemesh.nl)
- 2009: graduate PhD thesis cum laude, University of Amsterdam
- 2010-now: Post-graduate endodontology program director, ACTA
- 2013-now: coordinator of the endodontology division at ACTA

Courses and trainings

- 2006: apical surgery, Zurich, Switzerland
- 2007: didactic training for dental faculty teachers, Egmond
- 2012: BROK cursus – Basiscursus Regelgeving & organisatie voor klinisch onderzoek
- 2013: Management in scientific institutions, Sint-Michielsgestel
- 2014: Radiation safety, Amsterdam
- 2015: Radiation safety for synchrotron users, Hamburg Germany

Academic Appointments

- 2011: Program director, post-graduate endodontology, ACTA
- 2013: Sub-sectie coordinator, Endodontologie, ACTA

Professional Society Memberships

- European Society of Endodontology
- Nederlandse Vereniging voor Endodontologie (NVvE)
- Dutch Dental Association (NMT)
- American Association of Endodontics (AAE)

Honors and Awards

- Scientific research prize- European Society of Endodontology 2009
- Best teacher nomination 2011 Vrije Universiteit Amsterdam
- Luis Grossman award 2016, American Association of Endodontology

Clinical Activities

- Clinical practice limited to endodontics, Amsterdam

Institutional Service

- Dutch representative to the European Society of Endodontology (2010-now)
- Scientific committee, Dutch Association of Endodontology (NVvE) (2011-now)
- Scientific advisory board to Editorial board of the Journal of Endodontics (2010-now)
- Scientific advisory board International Endodontic Journal (2013-now)
- Scientific advisory board, guidelines in endodontology (2013-now)

Teaching

- BKO (Basis Kwalificatie Onderwijs) diploma – 2012
- Organization of clinical courses for dentists in ACTA (“ACTA Quality Practice” and ACTA Endo-leergang)
- Nominatie: “best Universitaire Docent 2011”
- Coordinator endodontology – Master accreditation for the post graduate Master in oral health sciences

PhD's : co-promotor

- : Yu Hong Liang (promotie September 2013)
- : Amir Moinzadeh (Defense May 2016)
- : Prasanna Neelakantan (Defense June 2016)
- : Puck van der Wouden (promotor- Geert van der Heijden)
- : Mikael Vogels (promotor- Jan de Lange)

- Master theses: (Dentistry students teaching) :
 1. Revascularisatie van pulpaweefsel
 2. Photo activated disinfection
 3. Microbial effect of Endox endodontic system
 4. Root canal treatment quality in undergraduate students
 5. Finding the MB2 canal in upper molars by undergraduate students

Scientific activities

- List of publications – see below
- List of lectures/ international congresses and invited speaker- see below

International Cooperation and mutual research projects:

- Zurich University, Switzerland
- Max Planck Institute, Berlin, Germany
- University of Göttingen: Dental School
- King's college, London, UK
- Hebrew University, Jerusalem, Israel
- Tel Aviv University, Tel Aviv, Israel
- University of Toronto, Canada
- University of Peking, Beijing, China
- University of Cagliari, Italy
- Diderot University, Paris, France
- Saveetha University, Chennai, India
- NYU dental faculty, New York, USA
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Organization of the 1st, 2nd, and 3rd European research meeting of the European Society of Endodontology October 2014, 2016 and 2018

More detailed information: personal website

www.shemesh.nl

Web of Science August 2017 H- score : 17

Sum of citations ; Sum of the Times Cited :
Citing articles
Average citations per item:

Google Scholar H- score : 24

Citatie-indexen	Alles	Sinds 2011
Citaties	1567	1228
h-index	24	20
i10-index	32	31

Valorization and commercialization

- z Coltene (in process, cooperation with Dr Suzette van der Waal and Prof. Wim Crielaard)

Presentations lectures and international exam boards (*as invited speaker*) 2011-2015.

2011

International:

Israel Association of Endodontics annual congress, Tel Aviv, Israel ---January

American Association of Endodontics annual session, San Antonio, USA ---April

Quintessence International congress, Moscow, Russia--- May

Haifa post-graduate school ,Haifa, Israel ---May

European Society of Endodontology, Rome Italy--- September (ook moderator)

University of Southern California, Annual endodontics symposium Los Angeles, USA , ---
November

Nederland:

North Sea Dental Symposium, Amsterdam- November

Rijksuniversiteit Groningen- Endo dag -December

Other activities:

Gent, Belgium: External examiner, Post-graduate endodontics

2012

International:

University of Hong-Kong, dep. Of Endodontology, February

American Association of Endodontics annual session, Boston, USA ---April

Paris Dental faculty, Paris, France , September

Lituanian dental association, Vilnius, Lithuania . November

Nederland:

Nederladse Vereniging voor Endodontologie, Amsterdam--- June

2013

International:

American Association of Endodontics annual session, Honolulu, USA ---April

Peking Union Medical college department of Stomatology, and Capital University Stomatology hospital -Beijing China August

European Society of Endodontology (ESE) , Lisbon, Portugal- September

German Society of Endodontology, June, Berlin

Israel Dental Association, November, Tel-Aviv

Swiss Society of Endodontics, Dec, Bern

National:

Nederladse Vereniging voor Endodontologie (NVvE), Amsterdam--- April- Dag voorzitter

2014

International:

Sonjiang Stomatology hospital, Shanghai, China- February

American Endodontic Association annual session, Washington DC April

International Dental school , Barcelona Spain- July

American Board of Diplomates of the American Endodontic Association, Denver USA-August

Swiss Endodontic Society, Zurich- October

European Society of Endodontology (ESE) , Moderator and organizer of the first international research meeting of the ESE - October Amsterdam

Baltic Endodontics congress, Vilnius Lithuania- November

Other activities:

Paris France: External examiner, Post-graduate endodontics

2015

International:

Sardegna Endodontic Society and department - Cagliari dental school, Italy- January

Chennai school of dental medicine, visit and lectures, January

Dentsply Opinion leaders meeting, Innsbruck Austria- February

Spanish Endodontic Society, Madrid, Spain - March

Canadian Endodontic Association, Banff- august

European Society of Endodontics (ESE) Barcelona Spain- September

British Endodontic Study club, London , UK - November

National:

Nederlandse Vereniging voor Endodontologie (NVvE), Amsterdam

2016

International:

CIOSP- Sao Paulo, Brazil - January

American Endodontic Association annual session, San Francisco CA April

Peer reviewed international journals

1. Tzanetakakis GN, Tzimpoulas N, Floratos S, Agrafioti A, Kontakiotis EG, Shemesh H. Full text publication rates of research abstracts presented at the European Society of Endodontology (ESE) Congresses in the last 20 years. *Int Endod J*. 2017 Jun 26
2. Ruiz XF, Duran-Sindreu F, Shemesh H, García Font M, Vallés M, Roig Cayón M, Olivieri JG. Development of Periapical Lesions in Endodontically Treated Teeth with and without Periodontal Involvement: A Retrospective Cohort Study. *J Endod*. 2017 Aug;43(8):1246-1249
3. PradeepKumar AR, Shemesh H, Chang JW, Bhowmik A, Sibi S, Gopikrishna V, Lakshmi-Narayanan L, Kishen A. Preexisting Dentinal Microcracks in Nonendodontically Treated Teeth: An Ex Vivo Micro-computed Tomographic Analysis. *J Endod*. 2017 Jun;43(6):896-900.
4. Sousa TO, Hassan B, Mirmohammadi H, Shemesh H, Haiter-Neto F. Feasibility of Cone-beam Computed Tomography in Detecting Lateral Canals before and after Root Canal Treatment: An Ex Vivo Study. *J Endod*. 2017 Jun;43(6):1014-1017.
5. Cotti E, Esposito SA, Musu D, Campisi G, Shemesh H. Ultrasound examination with color power Doppler to assess the early response of apical periodontitis to the endodontic treatment. *Clin Oral Investig*. 2017 Mar 6
6. PradeepKumar AR, Shemesh H, Jothilatha S, Vijayabharathi R, Jayalakshmi S, Kishen A. Diagnosis of Vertical Root Fractures in Restored Endodontically Treated Teeth: A Time-dependent Retrospective Cohort Study. *J Endod*. 2016 Aug;42(8):1175-80
7. Moinzadeh AT, Farack L, Wilde F, Shemesh H, Zaslansky P. Synchrotron-based Phase Contrast-enhanced Micro-Computed Tomography Reveals Delaminations and Material Tearing in Water-expandable Root Fillings Ex Vivo. *J Endod*. 2016 May;42(5):776-81.
8. Warnsinck CJ, Shemesh H. [Endodontics in motion: new concepts, materials and techniques 5. The dynamics of the periapical laesion]. *Ned Tijdschr Tandheelkd*. 2016 Jan;123(1):44-8.
9. Aznar Portoles C, Moinzadeh AT, Shemesh H. A Central Incisor with 4 Independent Root Canals: A Case Report. *J Endod*. 2015 Nov;41(11):1903-6.
10. Mirmohammadi H, Mahdi L, Partovi P, Khademi A, Shemesh H, Hassan B. Accuracy of Cone-beam Computed Tomography in the Detection of a Second Mesiobuccal Root Canal in Endodontically Treated Teeth: An Ex Vivo Study. *J Endod*. 2015 Oct;41(10):1678-81.
11. Moinzadeh AT, Zerbst W, Boutsoukis C, Shemesh H, Zaslansky P. Porosity distribution in root canals filled with gutta percha and calcium silicate cement. *Dent Mater*. 2015 Sep;31(9):1100-8.
12. Warnsinck CJ, Koutris M, Shemesh H, Lobbezoo F [Persistent dento-alveolar pain disorder (PDAP)]. *Ned Tijdschr Tandheelkd*. 2015 Feb;122(2):95-100.
13. Neelakantan P, Sharma S, Shemesh H, Wesselink PR. Influence of Irrigation Sequence on the Adhesion of Root Canal Sealers to Dentin: A Fourier Transform Infrared Spectroscopy and Push-out Bond Strength Analysis. *J Endod*. 2015 May 22.

14. Cohenca N, Shemesh H. Clinical applications of cone beam computed tomography in endodontics: A comprehensive review. *Quintessence Int.* 2015;46(6):465-80
15. P Neelakantan, M Nandagopal, H Shemesh, P Wesselink The effect of root dentin conditioning protocols on the push-out bond strength of three calcium silicate sealers .*International Journal of Adhesion and Adhesives* in print
16. Marques MS, Wesselink PR, Shemesh H. Outcome of Direct Pulp Capping with Mineral Trioxide Aggregate: A Prospective Study. *J Endod.* 2015 Apr 1.
17. Moinzadeh AT, Mirmohammadi H, Veenema T, Kleverlaan CJ, Wesselink PR, Wu MK, Shemesh H. Effect of a two-step placement procedure on the dislocation resistance of a methacrylate resin-based root canal sealer: a proof of concept. *J Adhes Dent.* 2014 Dec;16(6):567-74.
18. Warnsinck CJ, Shemesh H, Lobbezoo F [Persistent pain following endodontic treatment]. *Ned Tijdschr Tandheelkd.* 2013 Oct;120(10):530-6. Review. Dutch..
19. European Society of Endodontology, Patel S, Durack C, Abella F, Roig M, Shemesh H, Lambrechts P, Lemberg K. European Society of Endodontology position statement: the use of CBCT in endodontics. *Int Endod J.* 2014 Jun;47(6):502-4.
20. Moinzadeh AT, Mirmohammadi H, Hensbergen IA, Wesselink PR, Shemesh H. The correlation between fluid transport and push-out strength in root canals filled with a methacrylate-based filling material. *Int Endod J.* 2015 Feb;48(2):193-8.
21. Idzahi K, de Cock CC, Shemesh H, Brand HS. Interference of electronic apex locators with implantable cardioverter defibrillators. *J Endod.* 2014 Feb;40(2):277-80.
22. van der Borden WG, Wang X, Wu MK, Shemesh H. Area and 3-dimensional volumetric changes of periapical lesions after root canal treatments. *J Endod.* 2013 Oct;39(10):1245-9
23. S Patel, C Durack, F Abella, H Shemesh, M Roig and K Lemberg Cone Beam Computed Tomography in Endodontics- A review. *Int Endod J.* 2015 Jan;48(1):3-15
24. Y.-H. Liang, L. Jiang, X.-J. Gao, H. Shemesh, P. R. Wesselink and M.-K. Wu. *Int Endod J in print* Detection and measurement of artificial periapical lesions by cone-beam computed tomography .
25. Idzahi K, de Cock CC, Shemesh H, Brand HS. Interference of electronic apex locators with implantable cardioverter defibrillators. *J Endod.* 2014 Feb;40(2):277-80.
26. Liang YH, Jiang L, Chen C, Gao XJ, Wesselink PR, Wu MK, Shemesh H. The validity of cone-beam computed tomography in measuring root canal length using a gold standard. *J Endod.* 2013 Dec;39(12):1607-10.
27. van der Borden WG, Wang X, Wu MK, Shemesh H. Area and 3-dimensional volumetric changes of periapical lesions after root canal treatments. *J Endod.* 2013 Oct;39(10):1245-9.
28. Liu R, Hou BX, Wesselink PR, Wu MK, Shemesh H. The incidence of root microcracks caused by 3 different single-file systems versus the ProTaper system. *J Endod.* 2013 Aug;39(8):1054-6.

29. Hin ES, Wu MK, Wesselink PR, Shemesh H. Effects of self-adjusting file, Mtwo, and ProTaper on the root canal wall. *J Endod.* 2013 Feb;39(2):262-4.
30. Liang YH, Jiang L, Gao XJ, Shemesh H, Wesselink PR, Wu MK. Detection and measurement of artificial periapical lesions by cone-beam computed tomography. *Int Endod J.* 2014 Apr;47(4):332-8.
31. Liu R, Kaiwar A, Shemesh H, Wesselink PR, Hou B, Wu MK. Incidence of apical root cracks and apical dentinal detachments after canal preparation with hand and rotary files at different instrumentation lengths. *J Endod.* 2013 Jan;39(1):129-32.
32. Moinzadeh AT, Shemesh H, Neiryneck NA, Aubert C, Wesselink PR. Bisphosphonates and their clinical implications in endodontic therapy. *Int Endod J.* 2013 May;46(5):391-8.
33. Voet KC, Wu MK, Wesselink PR, Shemesh H. Removal of gutta-percha from root canals using the self-adjusting file. *J Endod.* 2012 Jul;38(7):1004-6.
34. Liang YH, Yuan M, Li G, Shemesh H, Wesselink PR, Wu MK. The ability of cone-beam computed tomography to detect simulated buccal and lingual recesses in root canals. *Int Endod J.* 2012 Aug;45(8):724-9.
35. Liang YH, Li G, Shemesh H, Wesselink PR, Wu MK. The association between complete absence of post-treatment periapical lesion and quality of root canal filling. *Clin Oral Investig.* 2012 Dec;16(6):1619-26.
36. Wu MK, Wesselink P, Shemesh H. New terms for categorizing the outcome of root canal treatment. *Int Endod J.* 2011 Nov;44(11):1079-80.
37. Patel S, Mannocci F, Shemesh H, Wu MK, Wesselink P, Lambrechts P. Radiographs and CBCT--time for a reassessment? *Int Endod J.* 2011 Oct;44(10):887-8.
38. Shemesh H, Cristescu RC, Wesselink PR, Wu MK. The use of cone-beam computed tomography and digital periapical radiographs to diagnose root perforations. *J Endod.* 2011 Apr;37(4):513-6.
39. Zaslansky P, Fratzi P, Rack A, Wu MK, Wesselink PR, Shemesh H. Identification of root filling interfaces by microscopy and tomography methods. *Int Endod J.* 2011 May;44(5):395-401.
40. 17: Shemesh H, Roeleveld AC, Wesselink PR, Wu MK. Damage to root dentin during retreatment procedures. *J Endod.* 2011 Jan;37(1):63-6.
41. Shemesh H, Wesselink PR, Wu MK. Incidence of dentinal defects after root canal filling procedures. *Int Endod J.* 2010 Nov;43(11):995-1000.
42. Souza EM, Pappen FG, Shemesh H, Bonanato-Estrela C, Bonetti-Filho I. Reliability of assessing dye penetration along root canal fillings using methylene blue. *Aust Endod J.* 2009 Dec;35(3):158-63.
43. Wu MK, Shemesh H, Wesselink PR. Limitations of previously published systematic reviews evaluating the outcome of endodontic treatment. *Int Endod J.* 2009 Aug;42(8):656-66.

44. Shemesh H, Bier CA, Wu MK, Tanomaru-Filho M, Wesselink PR. The effects of canal preparation and filling on the incidence of dentinal defects. *Int Endod J.* 009 Mar;42(3):208-13.
45. Bier CA, Shemesh H, Tanomaru-Filho M, Wesselink PR, Wu MK. The ability of different nickel-titanium rotary instruments to induce dentinal damage during canal preparation. *J Endod.* 2009 Feb;35(2):236-8.
46. Shemesh H. Limitations of the glucose leakage model due to reactivity of glucose with MTA. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2008 Nov;106(5):626; author reply 626-7.
47. Souza EM, Wu MK, Shemesh H, Bonetti-Filho I, Wesselink PR. Comparability of results from two leakage models. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2008 Aug;106(2):309-13.
48. Shemesh H, Souza EM, Wu MK, Wesselink PR. Glucose reactivity with filling materials as a limitation for using the glucose leakage model. *Int Endod J.* 2008 Oct;41(10):869-72.
49. Shemesh H, van Soest G, Wu MK, Wesselink PR. Diagnosis of vertical root fractures with optical coherence tomography. *J Endod.* 2008 Jun;34(6):739-42.
50. Shemesh H. To the editor: Hashem and Hassanien "ProRoot MTA, MTA-Angelus, and IRM used to repair large furcation perforations: sealability study". *J Endod.* 2008 May;34(5):512; author reply 512-3.
51. Shemesh H, van Soest G, Wu MK, van der Sluis LW, Wesselink PR. The ability of optical coherence tomography to characterize the root canal walls. *J Endod.* 2007 Nov;33(11):1369-73.
52. Shemesh H, van den Bos M, Wu MK, Wesselink PR. Glucose penetration and fluid transport through coronal root structure and filled root canals. *Int Endod J.* 2007 Nov;40(11):866-72.
53. Shemesh H, Goertz DE, van der Sluis LW, de Jong N, Wu MK, Wesselink PR. High frequency ultrasound imaging of a single-species biofilm. *J Dent.* 2007 Aug;35(8):673-8.
54. van der Sluis LW, Shemesh H, Wu MK, Wesselink PR. An evaluation of the influence of passive ultrasonic irrigation on the seal of root canal fillings. *Int Endod J.* 2007 May;40(5):356-61.
55. Shemesh H, Wu MK, Wesselink PR. Leakage along apical root fillings with and without smear layer using two different leakage models: a two-month longitudinal ex vivo study.
56. Rotstein I, Avron Y, Shemesh H, Dogan H, Mor C, Steinberg D. Factors affecting mercury release from dental amalgam exposed to carbamide peroxide bleaching agent. *Am J Dent.* 2004 Oct;17(5):347-50.
57. Rotstein I, Dogan H, Avron Y, Shemesh H, Mor C, Steinberg D. Protective effect of Copalite surface coating on mercury release from dental amalgam following treatment with carbamide peroxide. *Endod Dent Traumatol.* 2000 Jun;16(3):107-10.
58. Rotstein I, Dogan H, Avron Y, Shemesh H, Steinberg D. Mercury release from dental amalgam after treatment with 10% carbamide peroxide in vitro. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod.* 2000 Feb;89(2):216-9.

Book chapters:

- Vullen van het wortelkanalenstelsel . Shemesh H, Wesselink PR in : Endodontologie 3rd Edition, Bohn Stafleu van Loghum, 2010
- Root canal filling methods , Shemesh H , Moinzadeh A in : textbook of Endodontology , Wiley 3rd Edition in print (2017)

Editor : textbook of CBCT applications of endodontology , First edition, Quintessence 2016
(Portuguese Edition : 2017, Japanese Edition: 2018)

Professional publications

1. Een nieuwe kroon, een nieuwe endo ? H. Shemesh, P.R Wesselink. Quality Practice 2012 (6) 37-42.
2. Radiografie und digitale Volumetomografie (CBCT) - Zeit für eine Neubewertung? M.K. Wu, H. Shemesh, P.R. Wesselink, Endodontie 2011 299-401.
3. Is er iets bekend over alternatieven voor guttapercha? Een slimmere vulmethode? H Shemesh, P Wesselink Tandartsen vademecum 2 (3), 1-2
4. Radiografie und digitale volumetomografie (CBCT) - zie für einde Neubewertung? Wu MK, Shemesh H and Wesselink PR . Endodontis Quintessenz 2011 4: 399-401.
5. Press release 2014, Germany: Root canal treatment procedures investigated at BESSY II