

CURRICULUM VITAE

NAME Ronald L. Sakaguchi

DATE January 10, 2024

PRESENT POSITION AND ADDRESS

Academic Rank: Professor and Dean

Department/Div: School of Dentistry, Oregon Health & Science University

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II. EDUCATION

Undergraduate and Graduate

1976	B.S., Systems Science/Cybernetics	UCLA, Los Angeles, CA
1980	D.D.S., Dentistry	Northwestern University, Chicago, IL
1988	Ph.D., Biomaterials & Biomechanics	University of Greenwich, formerly Thames Polytechnic, London, England
2008	MBA, Entrepreneurship, summa cum laude	Babson College, Wellesley, MA

Postgraduate

1984	M.S., Dentistry (Prosthodontics)	University of Minnesota, Minneapolis, MN
2017	Stanford Innovation and Entrepreneurship Certificate	Stanford University, CA

Certification and Other Training

Academically board qualified for American Board of Prosthodontics, 1984
System dynamics modeling, 2010
Master Change Manager, GE Healthcare Change Acceleration Process (CAP), 2012
Lean for Production and Services, 2012
OHSU Performance Excellence, 2014
Program and Project Management, 2014
Certified Conflict Coach, OHSU, 2017

Licenses

Minnesota, Active not practicing, expires 31 August 2025

III. PROFESSIONAL EXPERIENCE

Academic

1973-1976	Research Assistant, UCLA Dept of Biology and VA Medical Center, Long Beach, CA
1977-1982	Research Assistant, American Dental Association Health Foundation Research Institute, Chicago, IL
1980-1982	Full-time practice of dentistry, Chicago College of Osteopathic Medicine
1984-1988	Research Associate, Assistant Professor, Joint appointment in the Departments of Removable Prosthodontics and Operative Dentistry (Biomaterials Program), University of Minnesota (UM)
1984-1990	Faculty intramural dental practice, limited to Prosthodontics, UM
1990-1992	Private dental practice, limited to Prosthodontics, Maplewood, MN
1988-1994	Assistant Professor, Associate Professor with tenure (1993), Department of Oral Sciences,

Member of the Minnesota Dental Research Center for Biomaterials and Biomechanics, Dental Research Institute, UM
 1994-1999 Associate Professor with tenure, Department of Biomaterials & Biomechanics, School of Dentistry, Oregon Health Sciences University (OHSU), Portland, OR
 2011-2022 Professor, Division of Management, School of Medicine, OHSU
 1999-present Professor with tenure, Oral Rehabilitation and Biosciences, School of Dentistry, OHSU

Administrative

2002-2004 Assistant Dean for Research, School of Dentistry, OHSU
 2004-2007 Associate Dean for Technology and Innovation, School of Dentistry, OHSU
 2007-2011 Associate Dean for Research and Innovation, School of Dentistry, OHSU
 2020 Lead, PPE Manufacturing Division, OHSU Logistics and Supply Chain
 2020-2021 Interim Dean, School of Dentistry
 2021-present Dean, School of Dentistry

Other

Adjunct Appointments

2000-2009 Honorary Visiting Professor, University of Manchester Turner Dental School, Manchester, England, UK
 2001-2007 Adjunct Professor, Department of Oral Biology, University of Missouri Kansas City; member of graduate faculty
 2003-present Adjunct Professor, Department of Biomedical Engineering, OHSU
 2009-2020 Adjunct Professor, Department of Community Dentistry, School of Dentistry, OHSU
 2009-2020 Adjunct Professor, Department of Restorative Dentistry, School of Dentistry, OHSU

Honors

1988- Omicron Kappa Upsilon Honorary Dental Society
 1988-1990, 1991, 1993 Teacher of the Year awarded by first year dental class, University of Minnesota
 1992 MARC Computational Structural Mechanics Conference "best paper" award, Monterey, CA 9/92
 2003 Finalist, OHSU Faculty Senate Service award
 2004 Finalist, OHSU Faculty Senate Teaching award
 2004 Alumni Merit Award, Northwestern University
 2008 Awarded Summa Cum Laude honors at graduation (top 5% of all MBA graduates), ranked #2 of 168 MBA graduates, Babson College, MA
 2021 American College of Dentists

IV. SCHOLARSHIP

Area(s) of Research/Scholarly Interest: Patient activation, change leadership, strategy, innovation, culture

Grants and Contracts:

Federal

1988 Co-principal investigator. A finite element model of a tooth and its supporting structures under occlusal load. Biomedical Research Support Grant, National Institute of Dental Research, 1/1/88-12/31/88. \$8790. 25% effort
 1992-1998 Principal Investigator. FIRST award: Biophysical analysis of polymerization contraction in composites. National Institutes of Health/National Institute of Dental Research. 8/1/92-7/30/98. \$300,000. 75% effort
 2000-2002 Co-principal investigator. Opto-mechanical characterization of engineered cartilage; subproject of the Biomedical Optics for Medical Research and Clinical Care NIH grant (Dr. Steven Jacques, PI). 6/6/00-6/6/03: \$63,000, 10% effort
 1998-2004 Principal Investigator. R01 DE09438, Reduction of Composite Polymerization Contraction Stress.

- National Institute for Dental Research/NIH. 8/1/98-7/31-04. \$734,876 direct costs; \$1,055,537 total. 20% effort
- 2003-2004 Co-Principal Investigator. R24 DE 015491, Research Infrastructure Grant. National Institute of Dental and Craniofacial Research/NIH. JL Ferracane, PI. 10% effort
- 2005-2009 Principal Investigator, OHSU Subcontract from UMKC. R21 DE017743, Kathleen Kilway, PI. Novel peptide additives to reduce composite shrinkage stress. National Institute of Dental and Craniofacial Research. 10% effort
- 2007-2013 Principal Investigator, R25 DE18206-01 Research Education Grant, Infusing Science and Research into the Dental Curriculum at OHSU, National Institute of Dental and Craniofacial Research/NIH, 4/1/07-3/31/13; \$549,936 direct costs; \$593,635 total. 20% effort

State and Local

- 1990-1991 Principal investigator. Dental occlusal analysis using piezoelectric film. University of Minnesota Grant-in-Aid of Research. 1/1/90-6/30/91. \$10,429, 10% effort

Other Support (Include Title, Source, PI, Amount Period, and % Effort)

- 1992-1993 Principal investigator. Computer simulation of dental implant restoration designs, American Fund for Dental Health, 7/1/92-6/30/93, \$35,000, 10% effort
- 1994-1995 Principal investigator. Investigational new drug. Block Drug Company. Radiographic analysis subcontract from the University of Minnesota. 11/1/94-5/1/96. \$67,000, 10% effort
- 1995-1996 Principal investigator. rhOP-1 Induced Bony Regeneration of Fresh Extraction Socket Defects in the Non-Human Primate, Stryker Biotech radiographic analysis subcontract. \$13,640, 5% effort
- 1998-2002 Principal Investigator. A pilot study of novo-perio treatment for class II furcation defects. Stryker Biotech. \$45,057, 10% effort

Publications/Creative Work:

Peer-reviewed

1. Naleway C, Sakaguchi RL, Mitchell E, Muller T, Ayer WA, Hefferren JJ. Urinary mercury levels in US dentists, 1975-1983: review of Health Assessment Program. JADA 1985; 111:37-42.
2. Douglas WH, Sakaguchi RL, DeLong R. Frictional effects between natural teeth in an artificial mouth. Dental Materials 1985; 1:115-119.
3. DeLong R, Sakaguchi RL, Douglas WH, Pintado MR. The wear of dental amalgam in an artificial mouth: a clinical correlation. Dental Materials 1985; 1:238-242.
4. DeLong R, Douglas WH, Sakaguchi RL, Pintado MR. The wear of dental porcelain in an artificial mouth. Dental Materials 1986; 2:214-219.
5. Sakaguchi RL, Douglas WH, DeLong R, Pintado MR. The wear of posterior composite in an artificial mouth: a clinical correlation. Dental Materials 1986; 2:235-240.
6. Schulte J, Anderson G, Sakaguchi RL, DeLong R. Wear resistance of isosit and polymethyl methacrylate occlusal splint materials. Dental Materials 1987; 3:82-84.
7. Reeh ES, Aguirre A, Sakaguchi RL, Levine M, Douglas WH. Hard tissue lubrication. Clinical Materials 1990; 6: 151-161.
8. Wilson PR, Goodkind RJ, DeLong R, Sakaguchi RL. Deformation of crowns during cementation. Journal of Prosthetic Dentistry 1990; 64:601-609.
9. Sakaguchi RL, Sasik CT, Bunczak MA, Douglas WH (1991). Strain gauge method for measuring polymerization contraction of composite resins. Journal of Dentistry 1991; 19(5):312-6.

10. Sakaguchi RL, Brust E, Cross M, DeLong R, Douglas WH. Independent movement of cusps during occlusal loading. *Dental Materials* 1991; 7: 186-190.
11. Sakaguchi RL, Cross M, Douglas WH. A simple model of crack propagation in dental restorations. *Dental Materials* 1992; 8(2): 131-136.
12. Sakaguchi RL, Wenande BS, DeLong R, Anderson GC, Douglas WH. A piezoelectric film transducer for dental occlusal analysis. *Clinical Materials* 1992; 10: 145-151.
13. Sakaguchi RL, Peters MCRB, Nelson SR, Douglas WH, Poort HW. The effects of polymerization contraction in composite restorations, *Journal of Dentistry* 1992; 20(3): 178-182.
14. Sakaguchi RL, Peters MCRB, Douglas WH. Curing Light Performance and Polymerization of Composite Restorative Materials, *Journal of Dentistry* 1992; 20: 183-188.
15. Sakaguchi RL and Borgersen SE. Nonlinear finite element contact analysis of dental implant components. *International Journal of Oral and Maxillofacial Implants* 1993; 8:655-661.
16. Haack JE, Sakaguchi RL, Sun T, Coffey JP. Determination of Preload Stress in Dental Implant Screws. *International Journal of Oral and Maxillofacial Implants* 1995; 10:529-536.
17. Sakaguchi RL and Borgersen SE. Nonlinear FE contact analysis of preload in dental implant screws. *International Journal of Oral and Maxillofacial Implants* 1995; 10(3): 295-302.
18. Sakaguchi RL. Biomechanics of Screw Retained Implant Prosthetic Components. *J Artificial Intelligence in Dentistry* 1995; 5(1): 12-15
19. Sakaguchi RL. Simulation and Visualization Methods in Biomedical Research. *J Artificial Intelligence in Dentistry* 1995; 5(1): 16-18
20. Versluis A, Douglas WH, Cross M, Sakaguchi RL. Does an incremental filling technique reduce polymerization shrinkage stresses? *Journal of Dental Research* 1996; 75(3):871-878.
21. Versluis A, Douglas WH, Sakaguchi RL. Determination of the linear thermal expansion coefficient using strain gages. *Dental Materials* 1996; 12:290-294.
22. Maeda Y, Nishida K, Sakaguchi RL. Screw mechanics in dental implants and their clinical implications. *Quintessence Dental Implantology* 1996; 3:2, 34-39.
23. Sakaguchi RL, Borgersen SE. Biomechanics of Screw-Retained Implant Prosthesis. *Quintessence Dental Implantology* 1996; 3:1, 29-38.
24. Drummond JL, Sakaguchi RL, Racean DC, Wozny J, Steinberg AD. Testing mode and surface treatment effects on dentin bonding. *Journal of Biomedical Materials Research* 1996; 32:533-541.
25. Sakaguchi RL, Versluis A, Douglas WH. Analysis of strain gage method for measurement of post-gel shrinkage in composite resins. *Dental Materials* 1997; 13:233-239.
26. Sakaguchi RL and Berge XH. Reduced light energy density decreases post-gel contraction while maintaining degree of conversion in composites. *Journal of Dentistry* 1998; 26:695-700.
27. Sakaguchi RL and Ferracane JL. Stress transfer from polymerization shrinkage of a chemical-cured composite bonded to a pre-cast composite substrate. *Dental Materials* 1998; 14:106-111.
28. Sakaguchi RL. A review of the curing mechanics of composites and their significance in dental applications. *Compendium* 20 1999; (supplement 25): 16-23.
29. Pintado MR, DeLong R, Ko CC, Sakaguchi RL, Douglas WH. Correlation of noncarious cervical lesion size and occlusal wear in a single adult over a 14-year time span. *J Prosthet Dent* 2000 Oct;84(4):436-43.
30. Sakaguchi RL and Ferracane JL. The effect of light intensity on the development of elastic modulus during polymerization of composites. *J Esthet Restor Dent* 2001; 13:121-130.
31. Sweatman TL, Baumgartner JC, Sakaguchi RL. Radicular temperatures associated with thermoplasticized gutta-percha. *J Endo* 2001; 27(8):512-515.
32. Sakaguchi RL, Shah N, Lim BS, Ferracane JL, Borgersen SE. Dynamic mechanical analysis of storage modulus development in light-activated polymer matrix composites. *Dental Materials* 2002; 18(3):197-202.
33. Lim BS, Ferracane JL, Sakaguchi RL, Condon JR. Reduction of polymerization contraction stress for dental composites by two-step light-activation. *Dent Mater.* 2002 Sep;18(6):436-44.

34. Yonehata Y, Maeda Y, Machi H, Sugawara K, Sakaguchi RL. The influence of working cast residual moisture and temperature on the fit of vacuum-forming athletic mouth guards. *J Prosthet Dent.* 2003 Jan;89(1):23-7.
35. Sakaguchi RL and Wiltbank BD. Critical configuration analysis of four methods for measuring polymerisation shrinkage strain of composites. *Dent Mater.* 2004 May;20(4):388-96.
36. Vandewalle KS, Ferracane JL, Hilton TJ, Erickson RL, Sakaguchi RL. Effect of energy density on properties and marginal integrity of posterior resin composite restorations. *Dent Mater.* 2004 Jan;20(1):96-106.
37. JK Lee, J-Y Choi, B-S Lim and RL Sakaguchi. Change of Properties during Post-Irradiation of a UDMA-Based Dental Resin. *J Biomed Mater Res.* 2004 Feb 15;68B(2):216-21.
38. RL Sakaguchi, BD Wiltbank and CF Murchison. Contraction force rate of polymer composites is linearly correlated with irradiance. *Dent Mater.* 2004 May;20(4):402-7.
39. RL Sakaguchi, BD Wiltbank and CF Murchison. Prediction of Composite Elastic Modulus and Polymerization Shrinkage by Computational Micromechanics. *Dent Mater.* 2004 May;20(4):397-401.
40. RL Sakaguchi, BD Wiltbank and CF Murchison. Cure induced stresses and damage in particulate reinforced polymer matrix composites: a review of the scientific literature. *Dent Mater.* 2005 Jan;21(1):43-6.
41. RL Sakaguchi. Mind Map: Summary of POCOS 2004, Portland Composites Symposium. *Dent Mater.* 2005 Jan;21(1):7-8.
42. RL Sakaguchi. Clinically relevant issues related to preheating composites. *J Esthet Restor Dent.* 2006 18(6):351.
43. Pfeifer CS, Ferracane JL, Sakaguchi RL, Braga RR. Factors affecting photopolymerization stress in dental composites. *J Dent Res* 2008 87(11):1043-7.
44. Pfeifer C, Braga R, Ferracane JL, Sakaguchi RL. Polymerization stress determinants in composites with different photoinitiator content. *Am J Dent* 2009 22(4):206-10.
45. Schneider LFJ, Consani S, Sakaguchi RL, Ferracane JL. Alternative photoinitiator system reduces the rate of stress development without compromising the final properties of the dental composite. *Dent Mater* 2009 25(5):566-72.
46. Yamamoto T, Ferracane JL, Sakaguchi RL, Swain MV. Calculation of contraction stresses in dental composites by analysis of crack propagation in the matrix surrounding a cavity. *Dent Mater* 2009 25(4):543-50.
47. Musanje L, Ferracane JL, Sakaguchi RL. Determination of the optimal photoinitiator concentration in dental composites based on essential material properties. *Dent Mater* 2009 25(8):994-1000.
48. Pfeifer CS, Ferracane JL, Sakaguchi RL, Braga RR. Photoinitiator content in restorative composites: influence on degree of conversion, reaction kinetics, volumetric shrinkage and polymerization stress. *Am J Dent* 2009 22(4):206-10.
49. Ferracane JL, Hilton TJ, Sakaguchi RL. Introduction to and outcomes of the conference on adhesion in dentistry. *Dent Mater* 2010 26(2):105-7.
50. Sakaguchi RL. Facilitating preceptor and student communication in a dental school teaching clinic. *J Dent Educ* 2010 74:36-42.
51. Wells-Gray EM, Kirkpatrick SJ, Sakaguchi RL. A dynamic light scattering approach for monitoring dental composite curing kinetics. *Dent Mater* 2010 26(7):634-42.
52. Sakaguchi RL. Evidence-based dentistry: achieving a balance. *J Am Dent Assoc* 2010 141(5):496-497.
53. Yamamoto T, Ferracane JL, Sakaguchi RL, Swain MV. Contraction stresses in dental composites adjacent to and at the bonded interface a measured by crack analysis. *Acta Biomaterialia* 2011 7(1):417-23.
54. Platta J, Scanlon C, Sakaguchi R, Schwarz. Whitening Strips are Better Than Toothpastes for Reducing Yellowness, But The Results Might Not be Clinically Significant. UTHSCSA CATs Library CAT# 2494, 2013.
55. Stoker A, Sakaguchi R, Schwarz. Fluoride Retention Greater if no Post Brushing Water Rinsing Routine is Used. UTHSCSA CATs Library CAT# 2493, 2013.
56. DeVincenzi C, Sakaguchi R, Schwarz E. CHX Mouthwash is More Effective in Plaque Removal Than an Essential Oil or Listerine Mouthwash. UTHSCSA CATs Library CAT# 2508, 2013.
57. McElhinney EA, Sakaguchi R, Schwarz E. Whitening at Home: Strips vs Gels. UTHSCSA CATs Library CAT# 2510, 2013.

58. Louie C, Sakaguchi R, Schwarz E. Low level Evidence about Tea Consumption and Oral Cancer Incidence. UTHSCSA CATs Library CAT# 2491, 2013.
59. Kelso C. Sakaguchi R, Schwarz E. Longitudinal Efficacy of At-Home Teeth Whitening Systems. UTHSCSA CATs Library CAT# 2500, 2013.
60. Waite J, Sakaguchi R, Schwarz E. Alcohol Consumption Increases the Incidence of Oral and Pharyngeal Cancer. UTHSCSA CATs Library CAT# 2509, 2013.
61. Wagner P, Sakaguchi R, Schwarz E. Receiving a Fluoride Varnish Semiannually Reduces Caries Incidence in Children. UTHSCSA CATs Library CAT# 2507, 2013.
62. Rosales J, Sakaguchi R and Schwarz E. Regular Toothbrushes are Better Than Finger Toothbrushes for the Removal of Plaque Throughout the Complete Primary Dentition. UTHSCSA CATs Library CAT# 2496, 2014.
63. Yamamoto T, Hanabusa M, Momoi Y, Sakaguchi RL. Polymerization stress of dental resin composite continues to develop 12 hours after irradiation. J Esthet Restor Dent 2015; 27(1):44-54.

Non-peer-reviewed

- Sakaguchi RL, DeLong R (1986). The computer in dentistry. Dentistry 1986, 6:23-24.
 Sakaguchi RL, DeLong R (1987). Computer-aided design in dentistry. Dentistry 1987, 7:6-9.
 Sakaguchi RL (2001). Design of fiber reinforced prosthesis using MSC.Marc. Design News.

Books

- Co-editor, Powers and Sakaguchi, Craig's Restorative Dental Materials, 12th edition, 2006
 Senior editor, Sakaguchi and Powers, Craig's Restorative Dental Materials, 13th edition, 2011
 Senior editor, Sakaguchi, Ferracane and Powers, Craig's Restorative Dental Materials, 14th edition, 2018
 Editor, Pfeifer, Ferracane, and Sakaguchi, Craig's Restorative Dental Materials, 15th edition, in process

Chapters

- Sakaguchi RL and Hampel AT. Bleaching of vital teeth (1992, 1994, 1997). Chapter in Clark's Clinical Dentistry.

Reviews

- Sakaguchi RL. A review of the curing mechanics of composites and their significance in dental applications. Compendium 20 (supplement 25): 1999, 16-23.

Sakaguchi RL and Wiltbank BD. Critical configuration analysis of four methods for measuring polymerisation shrinkage strain of composites. Dent Mater. 2004 May;20(4):388-96.

RL Sakaguchi. Review of the current status and challenges for dental posterior restorative composites: clinical, chemistry, and physical behaviour considerations. Dental Materials 2005 Jan;21(1):3-6.

Abstracts (* presented at scientific meeting)

1. Sakaguchi RL*, DeLong R, Douglas WH (1985). Friction and wear of posterior enamel in an artificial mouth. Journal of Dental Research 64:370;#1763.
2. Douglas WH, DeLong R, Sakaguchi RL (1985). Surface frictional changes in posterior materials during wear experiments in an artificial mouth. Journal of Dental Research 1985:64:370; #1764.
3. DeLong R, Sakaguchi RL, and Douglas WH (1985). Occlusal wear of posterior materials in an artificial mouth. Journal of Dental Research 64:371; #1765.
4. Sakaguchi RL*, Douglas WH, DeLong R, Pintado MR (1986). Occlusal wear of natural enamel in an artificial mouth. Journal of Dental Research 65:749; #215.
5. DeLong R, Sakaguchi RL, and Douglas WH, Pintado MR (1986). Remote-site clinical measurement of occlusal wear. Journal of Dental Research 65:749; #216.
6. Douglas WH, Sakaguchi RL, DeLong R, Pintado MR (1986). Posterior composite wear in an artificial mouth: a

clinical correlation. *Journal of Dental Research* 65:797; #647.

7. Olin PS, Lehner CR, DeLong R, Douglas WH, Sakaguchi RL (1987). Surface friction and porcelain wear in an artificial mouth. *Journal of Dental Research* 66:134; #219.

8. Brust E, Sakaguchi RL*, Douglas WH, DeLong R, Pintado MR (1987). Finite element analysis of the biomechanics of natural teeth. *Journal of Dental Research* 66:204;#779.

9. Sakaguchi RL*, Douglas WH, DeLong R (1988). The friction and lubrication of enamel-to-enamel contact. *Journal of Dental Research* 67:253; #1123.

10. DeLong R, Douglas WH, Pintado MR, Sakaguchi RL (1988). Accuracy of 3-D digitalization of posterior composite wear. *Journal of Dental Research* 67:362; #1994.

11. Brust E, Sakaguchi RL (1988). Biomechanics of natural and restored teeth during bruxing in an artificial mouth. *Journal of Dental Research* 67:380; #2141.

12. Sakaguchi RL, Anderson GC, DeLong R, Douglas WH (1989). Mechanical behavior of dental structures using FE modeling. *Journal of Dental Research* 68:294; #903.

13. Sakaguchi RL*, Anderson GC, DeLong R, Douglas WH (1989). Development of a mathematical model of dental structures. *Journal of Dental Research* 68:294; #902.

14. Sakaguchi RL*, Douglas WH (1989). Strain gauge measurement of polymerization shrinkage. *Journal of Dental Research* 68:977; #885.

15. Pintado MR, DeLong R, Douglas WH, Aguirre A, Levine MJ, Reeh ES, Sakaguchi RL (1990). Physiological wear of enamel contacts. *Journal of Dental Research* 69: 175, #529.

16. Sakaguchi RL*, Bunczak MA, Douglas WH (1990). Post-gel polymerization contraction of composites. *Journal of Dental Research* 69: 309, #1601.

17. Peters MCRB, Sakaguchi RL, Nelson SR, Poort HW, Douglas WH (1991). Polymerization contraction stresses in composites. *Journal of Dental Research*, 70:295, #239.

18. Bereuter J, Sakaguchi RL, Siskind L, Nystrom GP (1992). Traditional vs. digital image processing methods for periodontal measurements. *Journal of Dental Research* 71:212, #853.

19. Henseler S, DeLong R, Sakaguchi RL, Pintado MR (1992). Stability of epoxy replicas used for 3D surface measurements. *Journal of Dental Research* 71:141, #286.

20. Sakaguchi RL and Borgersen SE (1993). 3D nonlinear FE contact analysis of an implant-supported crown. *Journal of Dental Research* 72:191,#701.

21. Sakaguchi RL and Borgersen SE (1993). 3D FEA of polymerization contraction effects in composite restorations. *Journal of Dental Research* 72:309,#1645.

22. Versluis A, Sakaguchi RL, Sun T, Douglas WH (1993). Post-gel shrinkage measurements by means of strain gages. *Journal of Dental Research* 72:386,#2263.

23. Haack JE, Sakaguchi RL, Sun T, Coffey JP (1994). Determination of Preload Stress in Dental Implant Screws. *Journal of Dental Research* 73:202,#808.

24. Sakaguchi RL, Borgersen SE, Wong K (1994). Nonlinear contact analysis of preload in screw retained implant prosthetic components. *Journal of Dental Research* 73:203,#811.

25. Versluis A, Sakaguchi RL, Douglas WH (1994). Stress development in composite resins during polymerization. *Journal of Dental Research* 73:226,#1000.
26. Sakaguchi RL, Sun T, Haack JE (1994). External strain distribution on implant prosthetic components. *Journal of Dental Research* 73:232,#1045.
27. Sakaguchi RL* and Borgersen SE (1995). Effects of implant length and diameter on stress distribution. *Journal of Dental Research* 74 (AADR abstracts):92, #644.
28. Berge HX* and Sakaguchi RL (1995). Strain rate, temperature and hardness measurements of an autocuring composite. *Journal of Dental Research* 74 (AADR abstracts): 183, #1376.
29. Gonda T, Maeda Y, Sogo M, Kobayashi S, Nokubi, Sakaguchi RL (1996). Contact between magnetic attachments and keepers in overdenture during function. *J Dent Res* 75 (IADR abstracts), 58, #326.
30. Sakaguchi RL*, McLoughlin, Borgersen SE (1996). Load transfer characteristics of a low modulus titanium alloy for implants. *J Dent Res* 75 (IADR abstracts), 183, #1322.
31. Sakaguchi RL, Berge HX, Kashiwagi BSA (1996). Temperature dependent stress development in auto-cure composites. *J Dent Res* 75 (IADR abstracts), 235, #1743.
32. Sakaguchi RL, Berge HX, Kashiwagi BSA (1996). Elastic modulus development during polymerization of dental composite. *J Dent Res* 75 (IADR abstracts), 236, #1745.
33. Bourcy B, Sakaguchi RL, Bereuter J, Aeppli D, Wolff L (1996). Assessment of radiographic image processing methods in measuring bone loss. *J Dent Res* 75 (IADR abstracts), 321, #2427.
34. Sakaguchi RL and Karren DD (1997). Microleakage of posterior composite as function of curing light intensity. *J Dent Res* 76 (IADR abstracts), 73, #480.
35. Sakaguchi RL* and Berge HX (1997). Effect of light intensity on polymerization contraction of posterior composite. *J Dent Res* 76 (IADR abstracts), 74, #481.
36. Sakaguchi RL and Berge HX (1997). Light intensity effects on differential degree of cure of posterior composite. *J Dent Res* 76 (IADR abstracts), 260, #1972.
37. Sakaguchi RL* (1998). Characterization of nonlinear mechanical properties of composites during polymerization. *J Dent Res* 77 (AADR Abstracts), 190, #677.
38. Sakaguchi RL* and Ferracane JL (1998). Prediction of elastic modulus of resin matrix composites using micromechanics. *J Dent Res* (IADR Abstracts) 77:914, #2261.
39. Pintado MR, Sakaguchi RL, DeLong R, Ko CC, Douglas WH (1999). Abrfraction and occlusal wear: a correlation. *J Dent Res* (IADR Abstracts) 78:161, #447.
40. Sakaguchi RL* and Ferracane JL (1999). Effect of particle interface mechanics on elastic modulus of composites. *J Dent Res* (IADR Abstracts) 78:550, #3553.
41. Remmers TW, Sakaguchi RL (2000). Free surface deflection of dentin bonded composites. *J Dent Res* 79 (IADR Abstracts) 190, #371.
42. Sakaguchi RL* and Ferracane JL (2000). Dynamic mechanical analysis of storage modulus development rates of composites. *J Dent Res* 79 (IADR Abstracts) 419, #2206.
43. Vandewalle KS, Ferracane JL, Hilton TJ, Sakaguchi RL (2001). Effect of energy density on hardness and degree of conversion on posterior composite. *J Dent Res* 80 (AADR Abstracts) 111, #604.

44. Sakaguchi RL and Murchison CF (2001). Effect of temperature on tan delta (E''/E') during cure of composites. J Dent Res 80 (AADR Abstracts) 111, #605.
45. Sakaguchi RL* (2001). Effect of light intensity on tan delta onset during cure of composites. J Dent Res 80 (AADR Abstracts) 134, #790.
46. Payne MD, Ferracane JL, Sakaguchi RL (2001). Monitoring curing of composites with varied BHT levels using DMA and PhotoDSC. J Dent Res 80 (AADR Abstracts) 250, #1718.
47. Sakaguchi RL, Ferracane JL, Rozzi SM (2001). Storage modulus and tan delta onset during cure of an oxirane/polyol composite. J Dent Res 80 (IADR Abstracts) 591, #0520.
48. Lim BS, Ferracane JL, Sakaguchi RL, Condon JR (2001). Effect of composite thickness and curing techniques on the polymerization contraction stress. J Dent Res 80 (IADR Abstracts) 592, #0521.
49. Shah NC and Sakaguchi RL (2002). TMA dilatometry method for monitoring curing shrinkage of an unfilled resin. J Dent Res 81 (IADR Abstracts) A260, #2011.
50. Sakaguchi RL and Shah NC (2002). Boundary condition effects on contraction force development in composites. J Dent Res 81 (IADR Abstracts) A309, #2450.
51. Broome J and Sakaguchi RL (2002). Thermal effects on load transfer during composite polymerization. J Dent Res 81 (IADR Abstracts) A424, #3437.
52. Laughlin GA, Sakaguchi RL, Jacobs DW, Rozzi SM, Eick JD. Polymerization Shrinkage and Shrinkage Stress of an Experimental Dental Composite, 2003 IADR Abstracts, #1297.
53. Sakaguchi RL and Wiltbank BD. Prediction of Elastic Properties of Composites Using the Generalized Method of Cells. 2003 IADR Abstracts, #826.
54. Vandewalle KS, Ferracane JL, Hilton TJ, and Sakaguchi RL. Effect of Energy Density on Marginal Integrity in Class 2 Composite Restorations. 2003 IADR Abstracts, #0039.
55. Adams, J., Menard, D., Kirkpatrick, S.J., and Sakaguchi, R.L., Investigating the Mechanical Behavior of a Titanium Dental Implant Using Digital Shearography, Oregon Academy of Sciences Annual Meeting, McMinnville, OR, Feb 23., 2003.
56. Sakaguchi RL Polymerization Shrinkage is Dependent on Specimen Geometry and Constraint. 2004 IADR, Honolulu, HI.
57. Xiaokui Li, Muhammad Ashraf, Karl Thiele, Ron Sakaguchi, John C Mitchell. An In Vitro Study of the Accuracy of Computing Laminar Flow Stroke Volumes Using a Newly Developed Live 3D Color Doppler Ultrasound System. American Heart Association Scientific Sessions, New Orleans, LA, 2004.
58. Musanje L, Sakaguchi RL, Ferracane JL, Murchison CF. Light-Source, Material and Measuring-Device Effects on Contraction Stress in Composites. IADR/ AADR Annual Session, Baltimore, 2005.
59. Sakaguchi RL and Murchison CF. Temperature and Aging Effects on Hysteresis in Dental Composites. IADR/AADR Annual Session, Baltimore, 2005.
60. Laughlin GA and Sakaguchi RL. Reduction of Cusp Movement During Polymerization Using Experimental Low-Shrinkage Composites. IADR/AADR Annual Session, Baltimore, 2005.
61. Laughlin GA, Mitchell J, Murchison CF, and Sakaguchi RL. Changes in enamel strain environment during preparation and restoration. AADR Annual Session, Orlando, 2006.

62. Kilway KV, Code J, Holder AJ, Gutheil W, Sakaguchi R. Peptide dimethacrylate additives for dental composites. IADR/AADR Annual Session, New Orleans, 2007.
63. Pfeifer CS, Ferracane JL, Sakaguchi RL. Polymerization stress and kinetics of composites related to catalyst concentration. IADR/AADR Annual Session, New Orleans, 2007.
64. Yamamoto R, Ferracane JL, Sakaguchi RL, Momoi Y. Contraction stress propagates crack in surrounding ceramic. IADR/AADR Annual Session, New Orleans, 2007.
65. Delplanche J, Mitchell JC, Sakaguchi RL. Effects of esthetic bleaching on dye penetration into human enamel. IADR/AADR Annual Session, New Orleans, 2007.
66. Mathur S, Sakaguchi R, Murchison C. Utilizing MAC/GMC to create composite virtual prototypes. IADR/AADR Annual Session, Miami, FL, 2009, #1917.
67. Stewart J., Stewart D, Schoonheim-Klein M, Sakaguchi R, Kimmes N, Greenberg B, Oates T. Creating a Toolkit for Student-Faculty Clinical Research. Association for Dental Education in Europe, August 2010, Amsterdam, The Netherlands.
68. Sakaguchi R, Walsh D, Hibbard J, Delaney C. Developing a patient activation measure assessment for oral health. IADR/AADR Annual Session, Seattle, WA, 2013, #172614.
69. Walsh D, Sakaguchi R, Hibbard J, Delaney C. PAM survey instrument for measuring patient activation/oral-health behaviors at OHSU. IADR/AADR Annual Session, Seattle, WA, 2013, #172585.
70. Sakaguchi, R, Farsad, K. Developing skills in biomedical innovation and entrepreneurship. Peer Reviewed Presentation. OHSU Symposium on Educational Excellence. Portland, OR. April 2019.

Other

M.S. Thesis

Acoustic Transmission Analysis of Joint Function, School of Dentistry, University of Minnesota, 1984

Ph.D. Thesis

A biophysical analysis of wear of dental materials, School of Mathematics, Statistics, and Computing, Center for Process Analysis and Numerical Modeling, University of Greenwich (formerly Thames Polytechnic), London, England, 1988

Invited Research Lectures, Conference Presentations or Professorships:

Invited Lectures, International and National

- 1992 Canadian Academy of Restorative Dentistry, Winnipeg, Canada, "Composite Restorative Materials"
- 1995 American Society for Metals, International, Minneapolis, MN
"Materials for Oral Implantation: Silver-Tin-Mercury and Titanium"
- 1995 University of Minnesota School of Dentistry, "Radiographic Measurements"
- 1995 Japanese Society for Artificial Intelligence in Dentistry, Kyoto, Japan
"Computational Modeling in Biomedical Research"
- 1997 Academy of Dental Materials Annual Meeting, Honolulu, Hawaii
"The Role of Computers in Dental Materials Research"
- 1997 Travis Air Force Base Dental Department, Sacramento, CA
"Update on Posterior Composites and Post-Core Systems"
- 1998 IADR Annual Session, Nice, France, Lunch and Learning, "Computers in Dental Materials Research"
- 1999 Academy of General Dentistry, Internet Discussion Session, "The Internet as a Tool for Clinical Dentistry"
- 2002 'Simulation of Biomedical Devices', keynote speaker; Lund, Sweden; Dublin, Ireland; Birmingham, England

- 2002 Simulation of Biomedical Materials, Minneapolis, MN
- 2003 Polymerization of Composites, University of Missouri Kansas City
- 2003 Oregon Regional Dental School, National Conference for State Legislatures, Park City, UT
- 2003 IADR Symposium: Polymerization Shrinkage and Stress Development in Photo-activated Dental Restorative Systems. 2003 IADR, San Antonio, TX
- 2003 U of Buffalo, Restorative Dentistry, August 2003
- 2004 Keynote Address: Configuration and geometry of composite restorations, 2004 IADR, Honolulu, HI
- 2004 Plenary lecture, Portland Composites Symposium, June, 2004
- 2006 Mind Mapping, UMKC School of Dentistry, October 2006
- 2006 Grant writer's workshop, UMKC School of Dentistry, October 2006
- 2006 Manuscript publication and review process workshop, UMKC School of Dentistry, October 2006
- 2006 The importance of the thermal properties of dental resins. AADR Table clinic. IADR/AAADR Annual Session, New Orleans, 2006.
- 2007 NIH Clinical Translational Science Award (CTSA) School of Dentistry panel. IADR/AAADR Annual Session, New Orleans, 2007.
- 2009 ICARE: A workshop in service excellence in healthcare. University of Texas Health Science Center San Antonio Faculty Conference, May 28-29, 2009.
- 2015 Western Association of Core Directors Annual Meeting, invited speaker
- 2016 Minnesota Dental Research Center for Biomaterials & Biomechanics 25th anniversary conference, invited speaker

Regional and Local

- 1998 Clackamas County District Dental Society, 4/28/98, "An Overview of Composite Restorative Materials"
- 1998 Merchant Dental Study Club, "Using the Internet in Clinical Dentistry"
- 2000 Clackamas County District Dental Society. Update on dental materials.
- 2001 Clark County District Dental Society, "Dental Curing Lights and Dentin Bonding Agents"
- 2005 Oregon Dental Conference, April 2005. Evidence Based Dental Practice
- 2006 Evidence basis for engineering, Portland Section, IEEE

Conference & Symposia Proceedings

1. Sakaguchi RL, Borgersen SE, Douglas WH (1992). Three-dimensional finite element analysis of filled composite resins for dental restorative materials. MARC Users Conference, Monterey, CA, 9/92.
2. Sakaguchi RL and Borgersen SE (1992). Two-dimensional contact analysis of physiologically loaded dental implant materials. MARC Users Conference, Monterey, CA, 9/92. Winner, Best Paper at Conference.
3. Sakaguchi RL, Morin PJ, Bereuter JE (1992). Digital image enhancement of nonstandardized dental periapical radiographs in a distributed heterogeneous computing environment. UM Supercomputer Institute Research Report #92/167.
4. Sakaguchi RL and Borgersen SE (1992). Nonlinear finite element contact analysis of dental implant components. UM Supercomputer Institute Research Report #92/179.
5. Sakaguchi RL and Borgersen SE (1992). FEA of dental implant superstructures. Supercomputing 92, Minneapolis, MN.
6. Borgersen SE and Sakaguchi RL (1994). 3D Non-linear FEA contact analysis simulation of in-vivo barrel type stent expansion using a pressurized catheter balloon. The 4th International MARC Users Conference, Tokyo, Japan, 85-93.
7. Borgersen SE and Sakaguchi RL (1994). Application of non-linear FEA contact analysis for evaluation of interaction of pacing leads with extruded silicone rubber multi-lumen sheaths. The 4th International MARC Users Conference, Tokyo, Japan.
8. Sakaguchi RL (1995). Finite element analysis of dental implant biomechanics. The 20th meeting of the Society for Artificial Intelligence in Dentistry, Osaka, Japan. Invited paper.

9. Sakaguchi RL (1995). Computational Modeling in Biomedical Research. The 20th meeting of the Society for Artificial Intelligence in Dentistry, Osaka, Japan. Invited paper.
10. Sakaguchi RL and Berge HX (1995). Derivation of modulus development during composite polymerization: physical and numerical modeling. Proceedings of Conference on Biomaterials in a Simulated Oral Environment, Academy of Dental Materials, 93.
11. Pintado MR, Sakaguchi RL, Delong R and Douglas WH (1995). Eleven years clinical enamel wear: a case report. Proceedings of Conference on Biomaterials in a Simulated Oral Environment, Academy of Dental Materials, 116.
12. Borgersen, SE and Sakaguchi, RL. Using MARC/MENTAT to Evaluate Angioplasty Balloon Design Parameters and Their Effect on Stent Expansion. Conference on FEA Techniques in Bioengineering sponsored by MARC Analysis Research Corp. And the Univ. Of Minnesota MN Dental Research Center for Biomaterials and Biomechanics, April 1996.
13. Sakaguchi, RL and Borgersen, SE (1996). Numerical Analysis of Ti-13-13 Load Transfer Characteristics in Dental Implants. October 7-8, 1996, MARC International Users Conference, Monterey, CA.
14. Sakaguchi RL (1997). The role of computers in dental materials research. In: Nakajima H and Tani Y, editors. Third International Congress on Dental Materials: 1997 November 4-8, Shearton Waikiki, HI. Dallas: Academy of Dental Materials, 27-36.
15. Sakaguchi RL and Ferracane JL. Dynamic mechanical analysis of light-activated biomedical polymer matrix composites. Proceedings of the SEM Annual Conference on Experimental and Applied Mechanics, 33-36, 2001.
16. Ferracane JL, Vandewalle K, Sakaguchi R. Attempt to reduce internal stress in particulate composites through non-bonded nanofillers and the effect on toughness. Proceedings of the SEM Annual Conference on Experimental and Applied Mechanics, 86-89, 2001.
17. Sakaguchi RL and Borgersen SE. Design of biomaterials test methods using MSC.Marc. Proceedings of the Biomedical Simulation Conference, Univ of MN, 2001.
18. Adams, J., Menard, D., Kirkpatrick, S.J., and Sakaguchi, R.L., Investigating the Mechanical Behavior of a Titanium Dental Implant Using Digital Shearography, Oregon Academy of Sciences Annual Meeting, McMinnville, OR, Feb 23, 2003.
19. Sakaguchi RL and Wiltbank BD. Effect of constituent properties on composite elastic modulus using Generalized Method of Cells. O18, p 132, Transactions of the Fourth International Congress on Dental Materials, Honolulu, HI, 10/29-11/1/02.
20. Ferracane JL and Sakaguchi RL. Photo migration through dental composite as measured by degree of conversion and hardness. P69, p203, Transactions of the Fourth International Congress on Dental Materials, Honolulu, HI, 10/29-11/1/02.

Continuing Dental Education Courses Given

1985	MN Academy of Restorative Dentistry, Minneapolis
1986	West Central Dental Study Club, Wilmar, MN
1987	South Dakota Dental Study Club, Aberdeen, SD
1988	Northstar Study Club, St. Paul, MN
1988	Update in Dentistry, U of MN CDE
1989	Duluth Dental Forum, Duluth, MN
1990	Alumni Day, U of MN
1991	Associated Dentists, St. Paul, MN
1991	Metropolitan Study Club, Edina, MN

- 1992 North Memorial Hospital Study Club, Brooklyn Park, MN
- 1993 What's New in Dentistry, Univ of MN
- 1994 What's New in Dentistry, Univ of MN
- 1997 Radiographer Consultants, 3 day CE course in Playa del Carmen, Mexico
Review of composite restorative materials, impression materials, and implants
- 1998 OHSU Continuing Dental Education. Critical review of restorative materials, with Jack Ferracane, all day course, 5/3/98
- 1998 OHSU Continuing Dental Education. The Internet as a tool for dental practice. All day course with Mike Meredith. 9/98
- 1999 OHSU Continuing Dental Education. The Internet as a tool for dental practice. All day course with Mike Meredith. 10/99.
- 2000 Clackamas County District Dental Society. Update on dental materials.
- 2001 Clark County District Dental Society. Dental curing lights and dentin bonding agents. 10/01
- 2003 A comprehensive, analytical, rational and evidence (CARE) based approach to dental implants, co-course director, OHSU, 4/03, all day course
- 2005 Oregon Dental Conference, April 2005. Evidence Based Dental Practice, ½ day course.
- 2008 Discovery in the curriculum, OHSU Restorative Dept Annual Meeting
- 2008 Building Effective Presentations, OHSU Restorative Dept Annual Meeting

Other Presentations

- 1991 Dept of Prosthodontics, University of Florida
- 1991 Dept of Cariology and Endodontology, University of Nijmegen, the Netherlands
- 1997 Dept of Operative Dentistry faculty meeting
- 1994-2011 Yearly research seminar presentations updating research activities
- 1997 OHSU SOD Research Ferment presentation, "Radiographic Analysis"
- 2003 AADR Dental Materials Group, symposium on dental polymer biomechanics, San Antonio, TX
- 2003 OHSU SOD Operative Dentistry Meeting, Bend, OR
- 2022 OHSU Spirit of Leadership: leading and managing, Portland, OR
- 2023 OHSU Spirit of Leadership: leadership, management, time management, Portland, OR
- 2023 OHSU Spirit of Leadership: leadership, management, communications, Portland, OR
- 2024 OHSU MBA Tuesdays: Conflict, Portland, OR

V. SERVICE

Membership in Professional Societies:

- International Association for Dental Research
- American Association for Dental, Oral and Craniofacial Research
- Academy of Dental Materials, Fellow
- American Dental Education Association
- American Dental Association, Oregon Dental Association, Multnomah County Dental Society

Granting Agency Review Work:

- 1999-2003 Special Emphasis Review Panel, NIH/NIDCR
- 2000-2004 Scientific Review Panel, NIH/NIDCR OBM-1, ODCS
- 2001 Study Section Boundary Team for Center for Scientific Review, NIH
- 2008-2011 Scientific Review Panel, NIH/NIDCR R25 grants
- 2009 Scientific Review Panel, NIH/NIDCR P30 grants
- 2009 Scientific Review Panel, NIH/NIDCR ARRA Challenge Grants

Editorial and Ad Hoc Review Activities:

- 1992-2009 Dental Materials, Editor, North America
- 1993-2004 Journal of Dental Research, editorial board member 1999 to 2002
- 1995-2004 Journal of Biomedical Materials Research
- 1994-2008 International Journal of Oral and Maxillofacial Implants, editorial consultant
- 1997-2000 Journal of Endodontics
- 1998-2003 Journal of Prosthetic Dentistry, editorial review board member
- 2002-2008 Journal of Dentistry, editorial board member

2002-2003 Journal of Esthetic and Restorative Dentistry
 2002-2003 Operative Dentistry
 1988-2014 Ad-hoc reviewer for J Dental Research, Action Research Journal, Operative Dentistry, J Esthet Restorative Dentistry, J Biomed Mater Res A, International J Oral and Maxillofac Implants
 2010-2014 J Am Dental Assoc, editorial board member
 2023-present Senior editor, School of Dentistry Anthology

External Review Board

2002-2008 Chair, External Review Board for 'Pre and Post Doctoral Training, UMKC School of Dentistry'

International Association for Dental Research Session Chair

1992 International Association of Dental Research Annual Meeting
 1998 American Association of Dental Research Annual Meeting, Minneapolis, MN
 1999 International and American Associations for Dental Research Annual Meeting, Vancouver, BC
 2000 International Association for Dental Research Annual Meeting, Washington, DC
 2001 American Association for Dental Research Annual Meeting, Chicago, IL
 2001 International Association for Dental Research Annual Meeting, Chiba, Japan
 2002 International Association for Dental Research Annual Meeting, San Diego, CA
 2003 American Association for Dental Research Annual Meeting, San Antonio, TX
 2004 IADR Annual Meeting, Honolulu, HI
 2005 IADR Annual Meeting, Baltimore, MD

Symposia Organizer

2002 Dental Materials Group, IADR program chair, Chiba, Japan
 2004 Portland Composites Symposium, June, 2004, Portland, OR
 2009 Academy of Dental Materials Annual Session, Portland, OR

Elected Office in Professional Organizations

1996-1999 Secretary, Dental Materials Group-IADR
 1999-2000 President-Elect, Dental Materials Group-IADR
 2000-2001 Program chair, Dental Materials Group-IADR, 2001 IADR Annual Session, Chiba, Japan, June, 2001
 2000-2001 President, Dental Materials Group-IADR
 2001-2002 Immediate Past-President, Dental Materials Group-IADR
 1998-1999 Vice-President, Omicron Kappa Upsilon
 1999-2000 President, Delta Chapter OKU
 1998-2003 Board member-at-large, Academy of Dental Materials
 2002 Co-program chair, 4th International Congress on Dental Materials, 2002
 1998-2002 Web editor, Academy of Dental Materials
 1997-2009 North America Editor, Dental Materials

Committees:

International/National

1992-1994 Reviewer for American Dental Association Council on Dental Materials and Devices, implant acceptance program
 1988-present OKU membership committee
 1998-2000 IADR Dental Faculty Web Development Committee
 1998-2000 AADR Student Research Fellowships Committee
 2003-2004 AA/IADR Information Technology Committee
 2007-2008 NIH CTSA public-private partnerships committee
 2020-present American Dental Education Association, Council of Deans

Institutional

1998-1999 Web Steering Committee, OHSU
 1998-2000 Information Technologies Group Basic Sciences Advisory Committee, OHSU

1998-2000 Reviewer for NIDR Short-term Research Fellowship proposals, OHSU
2001-2005 Chair, High Performance Computing subcommittee of the Research Information Sys Steering Committee
2003-2005 OHSU representative to Oregon Nanoscience and Microtechnologies Institute (ONAMI)
2004-2005 Member of OHSU Research Advisory Council
2006-2010 OHSU Sponsored Project Administration Stewardship Alliance committee
2006-2010 OHSU Technology and Research Collaborations advisory committee
2008 OHSU Sustainability Advisory Council
2008-2010 OHSU Simulation Governance Board
2007 OHSU Leadership Development Committee
2010 OHSU PwC Change Management committees
2010 NWCCU OHSU Academic quality improvement/interprofessional education committee
2010 NWCCU OHSU Health policy and leadership committee
2009-2011 OHSU OSLER TL1/AHRQ T32 grant reviewer
2015 OCTRI Biomedical Innovation Program advisory board member
2020-present OHSU University Cabinet
2020-present OHSU Deans Council
2020-present OHSU Policy Advisory Committee
2021-2022 OHSU Provost search committee member
2022-2023 OHSU-PSU School of Public Health Dean, search committee co-chair
2022-present OHSU Foundation President, search committee member
2023-present OHSU Health Equity committee

Departmental

1995-2000 Rank and Tenure Committee, School of Dentistry
Chair from 1996 to 2000
1996-2010 Research Committee, OHSU School of Dentistry
1999-2000 Information Technology Committee, School of Dentistry
1997-1999 Chair, Instructional Technology Task Force, Oregon Health Sciences University
1998-2010 Domain III committee of the Competency Statement Task Force, OHSU School of Dentistry
1998-2002 Faculty advisor to the OHSU AADR Student Research Group
1998-2002 Web Editor, OHSU School of Dentistry
2001-2002 SD Information Technology Board, Chair
2001-2002 Director, SD Web Information Technologies
2003-2010 Lead, School of Dentistry government relations
2004-2005 Chair of SD Task Force on Educational Technology
2004-2007 School of Dentistry Admissions Committee
2005-2007 School of Dentistry Strategic Change Committee
2005-2007 School of Dentistry Strategic Change Curriculum Committee
2005-2007 Chair, School of Dentistry Core Teaching Cases subcommittee
2001-2011 Chair, School of Dentistry Faculty Development Committee
2021-2022 Division of Management Rank & Tenure Committee

Service within OHSU:

2012 School of Dentistry Faculty Practice Program, financial and strategy consultant
2012 School of Dentistry General Practice Residency, financial and strategy consultant
2012 OHSU Simulation Center, advisor
2013 Guest lecturer to OHSU PA program (personal strategic planning, 9/17/13)
2013 Guest lecturer to OHSU PA program (time management, 8/27/13)
2013-2014 School of Dentistry Post-graduate advanced education programs, strategy consultant
2013-2014 OHSU Library Services, strategy consultant
2014 Panel speaker, TTBD
2015 OHSU Informatics Governance Group, Advisory Board member
2015 OHSU Informatics Governance Group, consulting facilitator for visioning and shared values
2015 Oregon Bioscience Association Annual Meeting, planning committee

- 2015 ONPRC Associate Director, search committee member
- 2015 OCTRI Biomedical Innovation Program, Advisory Board member
- 2015-2016 OHSU INVENT innovation and entrepreneurship in the health & life sciences, education program
– founder, creator, organizer, speaker, moderator

Community Service:

- 1998 Minority High School Student Summer Research Fellowship Program
- 2001-2002 Touchstone School, dental presentations
- 2003 Celebration of Smiles, Portland Childrens’ Museum
- 2001-2003 Portland Community College Dental Assisting Program
- 2004 Portland Children’s Museum
- 2004 Touchstone School
- 2005 Portland Children’s Museum Celebration of Smiles, coordinated renovation of children’s dental chair
- 2005-2007 Coach and mentor, First Lego League team, Aquaneers
- 2008-2009 Chair of the Steering Committee, Babson College Portland Alumni Club
- 2010 & 2011 Oregon Dental Mission of Mercy
- 2010 Special awards judge, Intel Science Expo
- 2011 Judge, OHSU all-hill student research
- 2009-2012 Co-coach and mentor, Riverdale High School FIRST FRC Robotics
- 2010-2011 Volunteer, Project Access NOW
- 2010 Executive Development Institute, Mentors-people behind great leaders, Portland, OR, 10/21/10
- 2011 Executive Development Institute, Change: the biggest test of leadership, Portland, OR, 7/28/11
- 2011 Salvation Army Christmas Gift Program volunteer
- 2012 Executive Development Institute, Leadership Together Program, Seattle, WA, 1/28/12
- 2012 Executive Development Institute, Taking risks, Beaverton, OR, 9/27/12
- 2012 Salvation Army Christmas Gift Program volunteer
- 2014-2015 Oregon Food Bank volunteer

VI. TEACHING

Graduate Level Instruction

- 1995-97 Graduate Periodontology seminar, implant biomaterials and biomechanics, 1 session
- 1999, 2001 ECE 580, Introduction to Biomaterials, Oregon Graduate Institute for Science and Technology, spring quarters, 10 hours per quarter
- 1995-2006 DM 631. Graduate Biomaterials and Biomechanics for Orthodontics Residents, course director from 1997 to 2004.
- 2007-2009 Graduate biomaterials and biomechanics, lecture and lab
- 2011, 2016 MGT 545, MBA application project, fall, 1 credit
- 2011 MGT 502, MS independent study, Matt Bacigalupi, fall, 2 credits
- 2012 MGT 502, MS independent study, Kevin Kwiecien, summer, 2 credits
- 2014 MGT 502, MS independent study, Laura Pierce, spring, 2 credits
- 2009-2020 MKTG 511, Course director. Pioneering Innovation in Healthcare, OHSU-PSU MBA in healthcare management, 4 credits, winter
- 2010-2012 MGT 564, Course director. Business planning and strategy in healthcare management. OHSU MS in healthcare management, 4 credits, summer
- 2011-2014 MGMT 562, Co-course director, Business strategy capstone, OHSU MBA in healthcare management, 4 credits in winter
- 2011-2020 MGT 553, Course director. Capstone project in healthcare I, OHSU MS in healthcare management, 2 credits, winter
- 2011-2020 MGT 554, Course director, Capstone project in healthcare II, OHSU MS in healthcare management, 4 credits, spring

- 2011-2020 BA506, Course director, Capstone: integrative consulting engagement, OHSU MBA in healthcare management, 4 credits in winter, 2 credits in spring
- 2017-2020 Biomedical Innovation program, Dept of Interventional Radiology, OHSU. Trainer, mentor and facilitator.

Dental Predoctoral Level Instruction

- 1995-1998 OCCL 622. Conjoint occlusion course. 1 lecture
- 1995-2004 DM 631. Dental materials, third year dental students. 17 lectures per term
- 1998 DM 421. Biomaterials for senior dental hygiene students. 4 lectures per term
- 2001 DM421. Dental materials, DH4. Course director. 9 lecture hours per term
- 2003-2009 REST711, Dental biomaterials for implants, DMD2, 2 lecture hours per term
- 2003-2007 DM, Research Methods, summer DMD, 2 lecture hours per term
- 2006 The one-minute student clinician, workshop for DMD2
- 2006 Mind Mapping, workshop for DMD1
- 2006 Case based learning, workshop for DMD1
- 1996-2010 DM711. Introduction to Biomaterials for first year dental students. 11 lecture hours; Course director
- 2007-2014 CDEN701, clinical scientific inquiry, DS1, course director
- 2011 CDEN748, elective in patient activation, DS2 and DS1, course director
- 2016 CDEN732A, practice management, DS3, 2 lectures on team dynamics and emotional intelligence
- 2023 DM711, Introduction to Biomaterials for first year dental students, 1 lecture hour

Curriculum Development

- 1999, 2001 ECE 580, Introduction to Biomaterials, Oregon Graduate Institute for Science and Technology, spring quarters
- 2006-2009 Graduate program director, OHSU M.S. program in biomaterials & biomechanics. Developed curriculum for graduate program.
- 2009-2020 Course developer and director. Pioneering Innovation in Healthcare, OHSU-PSU MBA in healthcare management. 4 credits. New course in 2009.
- 2010-2011 Course developer and director. Strategy in healthcare management. OHSU MS in healthcare management. 4 credits. New course in 2010.
- 2010-2012 Course developer and director. Business strategy capstone. OHSU-PSU MBA in healthcare management. 4 credits. New course in 2010.
- 2014-2020 Co-developed MGT 569, Healthcare Marketing, OHSU MS in healthcare management. 4 credits. Completely revised course in 2017 and 2018.
- 2015 Co-developed ISQA 511, Managerial Decision Making, OHSU-PSU MBA in healthcare management. 4 credits.
- 2011-2020 Course developer and director. Capstone for OHSU MS in healthcare management. 5 credits. New course in 2011.
- 2011-2020 Course developer and director. Capstone for OHSU-PSU MBA in healthcare management. 6 credits. New course in 2011.
- 2017-2020 Course developer and director. Project Management for OHSU MS in healthcare management. 4 credits. Completely revised course in 2017 and 2018.

Mentoring and Advising

Student Advising

1994-1996 Primary M.S. Research Advisor for Blake Kashiwagi, Portland State University, Dept of Mechanical Engineering

1994-1995 Mentor for post-doctorate fellow, Sean McLoughlin

1996 Summer research advisor, Dustin Karren, second year dental student

1995-1996 Joint advisor with Jack Ferracane for Thomas J. Hilton, Dental Materials Fellowship

1994-1996 Research sponsor, Tetsuro Ogata, Visiting Assistant Professor, Kyushu University

1998 Research advisor, minority high school summer research fellowship program

1998-2000 Research mentor for AADR Student Research Fellow, Todd Remmers, second year dental student

1998-2002 Faculty mentor, OHSU AADR Student Research Group

1998-1999 Research mentor, Steve Graf, orthodontics resident

2000 Research advisor, Andrea Guyette, orthodontics resident

1999-2000 Mentor for undergraduate research student, Charles Murchison

2000-2002 Research co-advisor, Kraig Vandewalle, MS Program in Biomaterials

2001-present Research co-advisor, Lawrence Musanje, Post-doctoral fellow

2001-2002 Research co-advisor, Roberto Braga, post-doctoral fellow

2000-2002 Research co-advisor, Deborah Baker, OGI Electrical and Computer Engineering Ph.D. program

2001 Mentor for undergraduate research student, Kimberly Watson

2001 Research advisor, Patrick Chen, orthodontics resident

2001 Research advisor, Todd Wilson, orthodontics resident

2001-2003 Thesis committee, Gayle Laughlin, Oral Biology and Engineering, UMKC, Ph.D. program

2001-2002 Thesis committee, Donald Krenkel, Oral Biology and Engineering, UMKC, Ph.D. program

2003-2005 Primary research advisor, Bryce Wilcox, orthodontics resident

2003-2005 Primary research advisor, Neil Wiater, orthodontics resident

2003-2004 Research mentor, Brad Wiltbank, DSI

2003-2004 Research mentor, Mary Waller, U Portland

2003-2004 Research mentor, Kevin Scott, Portland State Univ

2004-2005 Research mentor, Robert McDonald, OHSU orthodontics resident

2005 Research mentor, Kari Borgen, OHSU orthodontics resident

2005 Primary research advisor, Andrew Dow, OHSU 2nd year dental student

2005-2007 Primary research advisor, John Delplanche, OHSU 2nd year dental student

2006-2007 Primary research advisor, John Bec, OHSU 2nd year dental student

2006- Primary research advisor, Sumir Mathur, OHSU 2nd year dental student

2006-2007 Faculty mentor for student innovators workshop

2006-2007 Primary research advisor, Barton Carter, OHSU orthodontics resident

2007-2009 Primary research advisor, Colonel Jon Dossett, USAF, graduate student

2010-2013 Primary research advisor, Daniel Walsh, OHSU dental student

2010 Primary research advisor, Trevor Frideres, OHSU dental student

2011-2013 Primary research mentor, Zach Howe, U Oregon undergraduate student

2013 Conor Scanlon, Riverdale High School student

2014 Primary mentor for independent study, Laura Pierce, MS program

2018 Primary mentor for individual capstone, Alex Krach, MS program

2021-2023 Andrew Sun, high school student

Faculty Development Program

1998 Introduction to Instructional Technology, OHSU
Research Seminar, Faculty Conference, 3 faculty and staff training sessions

2003-2004 Mind Mapping, 3 hours, OHSU SOD faculty development

2005-2008 Evidence based practice, OHSU SOD Restorative Department

2006-2008 The one-minute preceptor, OHSU SOD faculty development

2007 The one-minute preceptor, six month progress report, OHSU SOD faculty development

2008 Web-based modules on one-minute preceptor, critical thinking, discovery in the curriculum, searching the literature, evidence based dentistry, clinical questions

2008 Evidence based decision-making workshop, OHSU Group Practice Leaders

2009 A Community of Learning: Strategies for Faculty Development

2009 Evidence based dentistry workshop, 2 sessions

2011 R25 research education grant: final report, SOD faculty development

2010 Career perspectives: Using everyday technology for time management. School of Medicine Office of the Dean and the Oregon Clinical & Translational Research Institute (OCTRI), , Career & Mentoring Series, Dec 6, 2010.

2011 Time Management Solutions for Faculty, Dept of Molecular and Medical Genetics, OHSU, June 27, 2011.

2011 Time Management, Graduate Program in Molecular and Cellular Biosciences, Sept 20, 2011.

2011 Strategies for Effective Time Management. School of Medicine Office of the Dean and the Oregon Clinical & Translational Research Institute (OCTRI), Career & Mentoring Series, 12/6/2011, 58 participants

2012 Time management. OHSU Avel Gordly Center for Healing, Feb 8, 2012

2013 Personal strategy and time management, 3.0. Pediatric Grand Rounds, OHSU, Feb 8, 2013

2013 Doing the things that matter: time management and personal strategy. OHSU Career Series. Feb 11, 2013

2013 Personal strategy and time management, 3.0. Primary care review, OHSU, Feb 11, 2013

2014 Time management. OHSU Physician's Assistant Program. Nov 14, 2014.

2015 Time management. OHSU Physician's Assistant Program. Nov 6, 2015.

2016 Time management. OHSU Physician's Assistant Program. Nov 4, 2016.

2015 OHSU INVENT innovation and entrepreneurship in the health & life sciences, education program – founder, creator, organizer, speaker, moderator

2017 A Collaborative Framework for Assessing and Prioritizing Curricular Areas for Improvement and Reinforcement. First Annual Symposium for Educational Excellence, OHSU. Apr 14, 2017

2018 Practicing tools for building empathy. Second Annual Symposium for Educational Excellence, OHSU. Apr 28, 2018

2018 Biomedical Innovation seminars and workshops, sponsored by OHSU Dept of Interventional Radiology, summer 2018

Educational Leadership and Administration

2006-2009 Graduate program director, OHSU M.S. program in biomaterials & biomechanics

2004-2011 Chair, OHSU SOD faculty development committee