

## **CURRICULUM VITAE (updated 02/2024)**

**NAME:** Zero Domenick T.  
(Last) (First) (M. Initial)

**ADDRESS:** Indiana University School of Dentistry  
Oral Health Research Institute  
415 Lansing Street  
Indianapolis, IN 46202

  
02 FEB 2024

### **EDUCATION:**

Undergraduate:	<u>St. John's University</u>	<u>B.S.</u>	<u>1968-1971</u>
Graduate:	<u>Georgetown University School of Dentistry</u>	<u>D.D.S.</u>	<u>1971-1975</u>
Post Doctoral:	<u>University of Rochester</u>	<u>M.S.</u>	<u>1976-1979</u>

### **ACADEMIC APPOINTMENTS (inclusive dates):**

7/01/76 – 6/30/77 Clinical Instructor, Department of General Dentistry, Eastman Dental Center.  
7/01/77 – 6/30/79 Research Assistant, Department of Caries Research, Eastman Dental Center.  
7/01/79 – 7/31/81 Research Associate, Department of Caries Research, Eastman Dental Center.  
7/01/80 – 6/30/81 Instructor, Department of Dental Research, University of Rochester.  
3/01/81 – 7/31/81 Assistant Chairman, Department of Caries Research, Eastman Dental Center.  
7/01/81 – 8/31/81 Assistant Professor, Department of Dental Research, University of Rochester.  
8/10/81 – 6/30/85 Assistant Professor, Department of General Dentistry, Medical College of Virginia, Virginia Commonwealth University.  
7/01/85 – 6/30/88 Research Associate, Department of Oral Biology, Eastman Dental Center, Clinical Associate, Department of General Dentistry, Eastman Dental Center.  
10/01/86 – 12/31/97 Associate Professor of Clinical Dentistry (adjunct), University of Rochester.  
4/01/87 – 12/31/97 Associate Professor of Dental Research (adjunct), University of Rochester.  
7/01/88 – 6/30/90 Section Head, Intraoral Studies, Department of Oral Biology, Eastman Dental Center.  
7/01/90 – 8/31/92 Senior Research Associate, Eastman Dental Center  
7/01/90 – 6/30/99 Head, Division of Intraoral Studies, Department of Oral Sciences, Eastman Dental Center  
9/01/92 – 9/09/96 Associate Professor, Department of Oral Sciences and Department of General Dentistry, Eastman Dental Center  
9/14/94 – 12/31/98 Associate Director for Research, Eastman Dental Center  
1/01/95 – 6/30/99 Program Director, Oral Sciences, Eastman Dental Center  
9/10/96 – 6/30/99 Professor, Oral Sciences and General Dentistry Program, Eastman Dental Center  
1/01/98 – 6/30/99 Professor of Dentistry, University of Rochester Eastman Department of Dentistry  
7/01/99 – 6/30/14 Professor of Preventive and Community Dentistry (with tenure), Indiana University School of Dentistry  
7/01/99 – 6/30/2021 Director of the Oral Health Research Institute  
9/15/99 – 6/30/13 Chairman, Department of Preventive and Community Dentistry, Indiana University School of Dentistry  
8/01/02 – 6/30/13 Associate Dean for Research, Indiana University School of Dentistry  
4/01/09 – Graduate Faculty, Purdue University, special appointment based on the nomination of the Department of Foods and Nutrition  
7/01/14 – Professor, Department of Cariology, Operative Dentistry and Dental Public Health, Indiana University School of Dentistry  
3/01/16 – Adjunct Professor of Family Medicine, Department of Family Medicine, Indiana University School of Medicine

### **OTHER APPOINTMENTS AND PROFESSIONAL CONSULTANTSHIPS (including other remunerated employment):**

1977-1981 Administrator and Clinical Supervisor of Dental Care for Adult Handicapped Patients, Department of General Dentistry, Eastman Dental Center.

1980-1981 Administrator and Clinical Supervisor for the Supplemental Practice Program, Department of General Dentistry, Eastman Dental Center.

1986-1991 Dairy Council Inc., Advisory Committee,

1991-1995 National Dairy Council, Visiting Professorship in Nutrition Speakers List

1992-1996 Scientific Advisor to the International Life Sciences Institute, North America Oral Health Committee

1997-1999 Dental Advisory Board of the Gatorade Sports Science Institute

1999 CPP-ACP Scientific Advisory Board of Bonlac Foods Limited

2002-2004 Consultant, Dental Products Panel of the Medical Devices Advisory Committee, Center for Devices and Radiological Health, Food and Drug Administration

2002 Member, National Institute of Dental and Craniofacial Research, Caries Technical Advisory Panel

2004-2007 Member, Dental Products Panel of the Medical Devices Advisory Committee, Food and Drug Administration

2004-2007 Member, Expert Panel on School-based Dental Sealant Programs, Center of Disease Control and Prevention

2004 Member, Marion County Oral Health Task Force

2004 Member, GlaxoSmithKline New Horizons in Oral Care Advisory Board

2005 Member, GlaxoSmithKline Saliva/Dry Mouth Advisory Board

2005-2009 Member, NIDCR-funded Dental Practice Based Research Network Protocol Review Committee

2005-2006 Member, ADA Expert Panel on Professionally Applied Topical Fluoride

2006-2008 Consultant, ADA Council on Scientific Affairs Risk Assessment Subcommittee

2006-2018 Member, Internal Advisory Committee and Curriculum Subcommittee, NCI/NIH R25 Training in Research for Behavioral Oncology and Cancer Control; PI: Victoria Champion, IU School of Nursing

2006- Member, Cochrane Oral Health Group

2006- Founding Member, International Caries Detection and Assessment System (ICDAS) Foundation Board

2007-2008 Member, Data Safety Monitoring Board, Phase I/II Clinical Trial Sponsor: Solstice Neurosciences

2007-2015 Member, External Advisory Committee for the Forsyth Institute Children's Oral Health Center

2007 Member, Data Safety Monitoring Board, NIH/NIDCR-sponsored study on Xylitol for Caries Prevention in Inner-City Children

2007- Member, Task Force on Design and Analysis in Oral Health Research

2008-2018 Member, Advisory Committee, NIH-funded Indiana Clinical Research Center

2008-2016 Member, Executive Committee, NIH-funded Indiana Clinical and Translations Sciences Institute

2008-2009 Member, Coordination Committee, Health Resources and Services Administration (HRSA)-funded Indiana Strategic Oral Health Initiative

2008-2017 Member, Behavioral/Population Science Project Development Team, NIH-funded Indiana Clinical and Translations Sciences Institute

2010-2015 Member, Sjögren's Syndrome Foundation Clinical Practice Guidelines – Oral Working Group

2010-2015 Member, Johnson & Johnson Oral Care Advisory Board

2010-2011 Member, Steering Committee and Working Group, ADA Evidence-based Clinical Recommendations on Non-fluoride caries preventive agents

2011-2013 Member, Steering Committee and Working Group, ADA Evidence-based Update on Clinical Recommendations on Topical Fluoride

2011-2022 Chair, NIDCR Clinical Study Oversight Committee (CSOC) for Dental Genetics Studies

2011-2016 Member, C3 Jian Clinical Advisory Board

2012 Member, C3 Jian Data Review Committee

2014 Chair, Johnson & Johnson Asia Pacific Advisory Board

2015 Co-Chair, Regulatory and Commercialization Perspectives Session NIDCR Workshop on Re-mineralization: Current State of Science and Future Directions

2015-2016 Member, Academy of General Dentistry Acid Erosion Guidelines Task Force

2015- Consultant, FDA Center for Devices and Radiological Health

2015-2016 Consultant, World Dental Federation for the FDI/Colgate Caries Prevention Partnership

2016- Member, ADA Center for Evidence-Based Dentistry's Expert Panel for the ADA Clinical Practice Guideline on Caries Management

2016-2018 Member, Noveome Therapeutics Advisory Board and Perio 201 Steering Committee

2016- Member, Erosive Tooth Wear Foundation Scientific Advisory Team

2017-2018 Chair, Clinical Practice Guidelines Oral Working Group Sjögren's Syndrome Foundation

2017-2020 Founding Board Member, American Academy of Cariology and Chair Advocacy & Support Pillar

2019- Member, ADA Center for Evidence-Based Dentistry's Expert Panel for the ADA Clinical Practice Guideline on Restorative Treatments for Carious Lesions

2019-2021 Consultant, GreenMark Biomedical Inc.

2020 Member, Novartis Sjogren's Syndrome Steering Committee

2020-2021 Member, Alliance for a Caries Free Future 'Making Cavities History' Taskforce Core Group

2021-2022 Member, CareQuest Review Team on a meta-analysis on the clinical effectiveness of Curodont in treating initial caries lesions.

2022- Mentor, Smile Health (Simple, Minimally Invasive, Integrated, Low-barrier, and Equitable) program for start-up companies. No activity as of yet.

2022-2023 Member, Economist Impact's Improving Oral Health: Global Opportunity for Levelling Up Expert Panel, commissioned by European Federation of Periodontology and sponsored by Haleon

2022-2023 Consultant, Special Committee on Consensus Outcomes of the American Association of Endodontics

2022-2023 Member, Haleon expert steering group to develop Delphi consensus on best practice for the prevention and management of erosive tooth wear

2022- Consultant, American Dental Association Task Force on Sugar, Nutrition, and Diet

2023 Member, Haleon Caries Advisory Board

**LICENSURE AND CERTIFICATION:**

New York # 032278 (inactive) Northeast Regional Board  
 Virginia # 0401-005896 (inactive) Southeastern Regional Board  
 Indiana # 12010340A

**PROFESSIONAL ORGANIZATIONS** (including offices held and committee memberships):

**Scientific and Professional**

International Association for Dental Research (IADR)  
 American Academy of Cariology (AAC)  
 American Association for Dental Research (AADR)  
 European Organization for Caries Research (ORCA)  
 American Dental Association (ADA) (Achieved Life Membership 2022)  
 American Dental Education Association (ADEA)

**Honorary**

Omicron Kappa Upsilon Dental Fraternity – Achieved Life Membership 2009  
 Pierre Fauchard Academy  
 American College of Dentists (Life Member)

**HONORS AND AWARDS:**

1975 Graduated from Dental School with the following honors:  
 a. Graduate Dental School cum laude

- b. International College of Dentists Award for the Most Professional Growth and Development during Four Years of Dental Study
  - c. Alpha Omega Scholarship Rating for the Highest Scholastic Standing Four Years of Dental Study
  - d. Dr. Morris Horowitz Memorial Prize for Scholastic Achievement
  - e. Z. Bernard Lloyd Memorial Award for Outstanding Achievement in Orthodontics
  - f. William Brown Ingersoll Endodontics Award for Outstanding Scholarship
- 1979-1981 NIH National Research Service Award for Individual Postdoctoral Fellows
- 1979 Michael G. Buonocore Prize - AADR Rochester Chapter
- 2007, 2022 Indiana University School of Dentistry Alumni Association Distinguished Faculty Award for Research
- 2022 Yngve Ericsson Prize for Research in Preventive Odontology presented at the ORCA Congress in Cagliari, Sardinia, Italy
- 2022 American Dental Association's 2022 Norton M. Ross Award for Excellence in Clinical Research
- 2022 Callahan Memorial Award presented at the Ohio Dental Association's 156th Annual Session
- 2023 IADR Distinguished Scientist William H. Bowen Research in Dental Caries Award

**TEACHING ASSIGNMENTS:**

**1. Virginia Commonwealth University, Medical College of Virginia, 110 dental students**

- a. Cariology Course - Course director and principle lecturer 1982-1984, 19 lecture hours covering the epidemiology, etiology, diagnosis and prevention of dental caries. Prepared a complete course syllabus. Lecture topics: Epidemiology of Caries; Etiology of Caries: Caries Theories/ Time; Etiology of Caries: Host Factors – Teeth; Etiology of Caries: Microbiological Factors I & II; Etiology of Caries: Host Factors – Saliva; Etiology of Caries: Dietary Factors; Physical Chemistry of Caries; Caries Diagnosis and Treatment Planning; Caries Research; Clinical Cariology: Special Situations; Caries Prevention; Caries Prevention: Plaque Control – Chemical; Caries Prevention: Dietary Measures; Fluoride: Overview; Fluoride: Biochemistry
- b. Pre-Clinical Laboratory - Occlusion Course Instructor, 1982 - 1984
- c. Clinical Instructor in the Clinical Diagnostic and Skill Development Clinic, Preventive Clinic, Dental Auxiliary Utilization Clinic, 1983 - 1985.

**2. Virginia Commonwealth University Graduate Students**

<u>Course</u>	<u>Topic</u>	<u>Date</u>
Basic Science Lecture Series - Microbiology Section	Dental Plaque Ecology	1983, 1984, 1985
"	Microbiology of Dental Caries	1983, 1984, 1985

**3. Eastman Dental Center – Dental Postgraduate Students and Residents**

<u>Course</u>	<u>Topic</u>	<u>Date</u>
Scientific Basis of Dental Practice	Carbohydrates	November 15, 1977
General Practice Presentation Series	Faculty Advisor for Residents	1978 - 1981
General Dentistry Summer Lecture Series	Dentistry for the Handicapped	August 28, 1978
General Dentistry Summer Lecture Series	Re-evaluation of the Routine Prophylaxis	August 18, 1978
Dental Caries	Pellicle-Enamel Interface	November 3, 1978
Controversies in Dentistry Series	Faculty Advisor for Residents	1979 - 1981
General Dentistry Summer Lecture Series	Dental Care for the Handicapped	July 5, 1979
General Dentistry Summer	Re-evaluation of the	July 13, 1979

Lecture Series	Routine Prophylaxis	
Science of the Oral Environment	Dietary Effects on Plaque pH	September 25, 1979
Science of the Oral Environment	Structure of Acquired Pellicle	January 15, 1980
Science of the Oral Environment	The Role of Acquired Pellicle in Dental Disease	January 22, 1980
Scientific Basis of Dental Practice	Sound and Aerosols: the use and dangers of the high-speed drill	April 9, 1980
General Dentistry Case Presentation Series	Group Leader	1980 - 1981
General Dentistry Summer Lecture Series	Opportunities for the Handicapped at EDC	July 22, 1980
General Dentistry Summer Lecture Series	Re-evaluation of Routine Prophylaxis	July 29, 1980
Scientific Basis of Preventive Dentistry	Evaluating the Cariogenicity of Foods	March 17, 1981
General Dentistry Summer Lecture Series	Method of Caries Diagnosis and Treatment Planning	August 1985 - 1987
General Dentistry Summer Lecture Series	Role of Fluoride in Caries Prevention	August 1985 - 1987
General Dentistry Case Presentation Series	Group Leader	1985 - 1987
General Practice Presentation Series	Faculty Advisor for Residents	1985 - 1987 1990-1999
General Dentistry Prevention Course	Seminar Organizer and Leader	1986, 1987
General Dentistry Topic of the Week	Seminar Organizer and Leader	1986, 1987
Chemical Aspects of Dental Caries	Extracellular Polymers and Caries	December 9, 1986
Current Concepts in Pediatric Dentistry	Microbial Virulence Factors Involved in Caries	May 18, 1987; April 25, 1988; February 13, 1989
Chemical Aspects of Dental Caries	Clinical Aspects of Remineralization	April 25, 1989; April 24, 1990; May 14, 1991; April 28, 1992; April 27, 1993; April 29, 1994; April 25, 1995
Chemical Aspects of Dental Caries	Fluoride and Plaque Metabolism	Mar. 30, 1993; April 8, 1994; April 4, 1995
General Dentistry Summer Lecture Series	Prevention I	August 19, 1991; August 5, 1992; July 14, 1993; July 7, 1994; July 19, 1995; August 14, 1996; August 5, 1997
General Dentistry Summer Lecture Series	Prevention II	August 26, 1991; August 12, 1992; July 21, 1993;

		July 14, 1994; July 27, 1995; August 21, 1996; August 19, 1997
General Dentistry Summer Lecture Series	Research Opportunities	August 18, 1992; August 16, 1995
Current Aspects in Pediatric Dentistry	Research Opportunity in Intraoral Studies	November 12, 1991; October 2, 1992
Scientific Basis of Safe Dental Practice	Fluoride: Dental Uses, Safety, Control	November 26, 1991; September 28, 1993; March 5, 1996; March 17, 1998
General Practice Presentation Series	Course Director and Student Advisor	1991 - 1995
General Practice Presentation Series	Student Advisor	1996-1997
Clinical Aspects of Dental Caries	Course Director	1996- 1999
"	Overview of the Etiology of Dental Caries	January 28, 1997; January 23, 1998; February 2, 1999
"	Caries Diagnosis and Treatment Planning	January 26, 1996; February 4, 1997; January 30, 1998; February 16, 1999
"	Clinical Use of Fluorides	February 9, 1996; February 25, 1997; February 20, 1998; March 16, 1999
"	Role of Diet in Caries Prevention	February 23, 1996; February 11, 1997; February 6, 1998; February 9, 1999
"	Diagnosis and Management of Dental Erosion	April 5, 1996; March 4, 1997; February 27, 1998; April 13 & 20, 1999

**4. University of Rochester Graduate Students**

<u>Course</u>	<u>Topic</u>	<u>Date</u>
Saliva	Organic Components of Saliva	Oct. 31, 1980
Pharmacology and Therapeutics	Nonsteroidal Anti- Inflammatory Drugs	April 2, 1990; March 2, 1992
Fundamentals of Dental Caries	<i>In situ</i> Caries Models	November 28, 1994; November 27, 1995; November 11, 1996; November 10, 1997; November 2, 1998;
"	Enamel, Dentine, Cementum (Chemistry and Structure)	October 9, 1995; September 16, 1996; September 15, 1997; September 14, 1998
"	Histology of Carious Lesions	October 9, 1995;

	in Enamel	September 16, 1996; September 15, 1997; September 14, 1998
"	Enamel De- and Remineralization	November 6, 1995; October 21, 1996; October 20, 1997; October 12, 1998
"	Rational Use of Fluorides	November 6, 1995; October 21, 1996; October 20, 1997; October 12, 1998

**5. Indiana University School of Dentistry 100 Dental Students**

	<u>Course</u>	<u>Topic</u>	<u>Date</u>
T720	Advanced Restorative Dentistry	Caries Risk Assessment and Prevention	October 31, 2000; September 4, 2001; August 20, 2002; August 19, 2003
"	"	Management of the High Caries Risk Patient	November 14, 2000; September 11, 2001; September 03, 2002; August 26, 2003
"	"	Management of Dental Caries I	August 17, 2010; August 16, 2011
"	"	Management of Dental Caries II	August 24, 2010 August 23, 2011
T720	GLA Module	Mentor	Spring & Fall 2000-2018; Spring 2019 Online Spring 2020
T540	Dental Sciences I	Introduction to Dental Caries	November 2, 2001 Spring 2002
T562	Oralfacial Biology II	Introduction to Dental Caries Etiology: Diet	April 12, 2001 May 1, 2001; April 11, 2002
"	"	Caries Management Diet	May 22, 2001; May 28, 2002; April 24, 2012
"	"	Diagnosis and Management of Dental Erosion	May 10, 2001; May 23, 2002; May 22, 2003; May 25, 2004; May 24, 2005; May 23, 2006; April 12, 2007; April 8, 2008; April 9, 2009; April 13, 2010; April 12, 2011;
"	"	Introduction to Caries Management/ Caries Theories and Diet	April 11, 2013
T740	Clinical Sciences III	Clinical Coverage – 4h/week	Fall 2001; Spring/Fall 2002; Spring 2003; Spring 2003;

T840	Clinical Sciences IV	Clinical Coverage – 4h/week	Spring & Fall 2006-2016 Fall 2001; Spring/Fall 2002; Spring 2003; Spring/Fall 2006-2016
D520	Risk Assessment, Prevention, and Early Management of Dental Disease	Understanding the Etiology of Dental Caries and Its Application in Caries Management	Oct 14 & 28, 2014
"	"	Etiology of Caries: Caries Theories	Sep 8, 2015; Oct 11, 2016; Oct 10, 2017; Aug 28, 2018
"	"	Etiology of Caries: Diet factor	Sep 29, 2015; Sep 27, 2016; Oct 10, 2017
"	"	Etiology of Caries: Caries Theories and Diet Factor	Aug 28, 2018; Sep 24, 2019; Sep 24, 2020; Sep 9, 2021; Sep 13, 2022 Sep 12, 2023
"	"	Fluoride mechanism of action, kinetics, metabolism and toxicity	Sep 21, 2021
"	"	Introduction to dental plaque (caries and periodontal disease)	Sep 23, 2022 Aug 29, 2023
D630	Clinical Applications of Cariology and Operative Dentistry Concepts	Etiology of Dental Caries I (Theories/Host Factors)	Aug 20, 2015
"	"	The Role of Dietary Factors in Dental Caries Etiology	Aug 27, 2015
"	"	Caries Risk Assessment: Clinical Application (Laboratory)	Sep 3, 2015
D703	Applied Clinical Patient Management Group Learning Activity (GLA)	Mentor	Spring/Fall 2018
D735	Cariology and Operative Dentistry Clinic I	Clinical Coverage – 4h/week	Fall 2017
D736	Cariology and Operative Dentistry Clinic II	Clinical Coverage – 4h/week	Spring 2018
SP20	Online - Integrating Interprofessional Collaboration Skills (Anchor 4)	Facilitator	Spring 2020; Spring 2021
	Online – Applying Interprofessional Collaboration Skills (Anchor 3)	Facilitator	Spring 2020
	Online - Introducing Interprofessional Collaboration (TEACH! Anchor 1)	Facilitator	Fall 2020

## 6. Indiana University School of Dentistry Graduate Students

	<u>Course</u>	<u>Topic</u>	<u>Date</u>
R956	Current Topics in Oral Biology	Enamel Remineralization Oral Biology of Chewing Gum	Oct 2 & 6, 2000 Nov 12 & 14, 2001; Feb 28 & Mar 8, 2007



"	"	Oral Pharmacokinetics of Fluoride	Feb 16 & 18, 2009;
"	"	In situ biofilm model studies	Jan 25 & 30, 2017;
"	"	Article review	Spring, 2021; Spring, 2022
R959	Graduate Oral Microbiology	Use of In situ Models in Oral Microbiology	Jan 26, 2001; Jan 25, 2002; Jan 24, 2003; Feb 20 & 22, 2006
R909	Advanced Preventive I	Diet and Caries	Sep 19, 2000; Oct 23, 2001; Oct 15, 2002; Oct 14, 2003; Sep 28, 2004; Sep 11, 2012; Sep 10, 2013
"	"	Caries Management	Sep 21, 2010
"	"	Saliva and Dental Caries	Sep 13, 2011
"	"	Etiology of Caries: Caries Theories and Host Factors	Aug 27, 2013
		Etiology of Caries: Microbial Factor	Aug 28, 2022 Sep 5, 2023
R910	Advanced Preventive II	Caries Management: Diet	Nov 21, 2000; Jan 22, 2002; Feb 13, 2004; Apr 23, 2012; Jan 21, 2014; Jan 27, 2015
"	"	Caries Management High Risk Patient Populations	Mar 24, 2015
"	"	High Caries Risk / Diet and Caries Management	Mar 8, 2016
"	"	Dental Erosion Etiology & Management	Apr 2, 2002; Apr 8, 2003; Apr 12, 2005; Feb 7, 2006; Feb 27, 2007; Mar 10, 2009
"	"	High Caries Risk Assessment and Management & ICCMS	Mar 6, 2018; Mar 5, 2019; Jan 21, 2020; Jan 12, 2021; Mar 29, 2022
R911	Advanced Preventive III	Acquired Pellicle/Organic Matter In situ Models for Caries Research	Oct 5, 2001; Sep 25, 2003; Aug 29, 2005
"	"	Design of Clinical Studies in Caries Research	Sep 22, 2014; Sep 13, 2017
R955	Oral Biology	Fluoride: Kinetics and interaction with Plaque and the Tooth	Jul 20, 2006
G910	Preventive Dentistry Seminar	Caries Risk Assessment	Feb 18, 2014; Feb 24, 2015

	"	"	G910 Research Methods: Design of Clinical Studies	Oct 15, 2014
			Current Understanding of Caries Risk Assessment	Sep 16, 2020; Oct 06, 2021
			The Role of Diet in Dental Caries	Aug 31, 2022 Oct 18, 2024
R980	Research Methodology		Clinical Protocol Development	Oct 14, 2015; Oct 12, 2016; Nov 8, 2017; Nov 28, 2018; Nov 6, 2019; Nov 4, 2020; Oct 27, 2021; Nov 2, 2022 Nov 1, 2023
	"	"	Ethical Issues in Clinical Research	Sep 29, 2021; Oct 26, 2022 Oct 25, 2023
Oral & Maxillofacial Surgery Residents			Clinical Research Protocol Development	Apr 6, 2023
			Clinical Research Ethics	Apr 13, 2023
Orthodontic Residents			Introduction to Research	Jul 14, 2023

**PROFESSIONAL SERVICE:**

Reviewer National Institutes of Health/National Institute of Dental and Craniofacial Research (NIH/NIDCR)

1992	Special Outside Reviewer
1993	Member, Special Review Group, Clinical Core Centers for Preventive and Operative Dentistry
1996	Member, Special Emphasis Panel, Program Project Review
1999	Chair, Teleconference Review of R01
2003	Member, Special Emphasis Panel, Teleconference Review of R01
2004	Member, Special Emphasis Panel, Teleconference Review of R21
2004	Member, Special Emphasis Panel, Teleconference Review of R01
2005	Member, Special Emphasis Panel, Teleconference Review of R21
2005	Member, Special Emphasis Panel, Teleconference Review of R23
2005-2009	Member, Protocol Review Committee, Dental Practice Based Research Network
2008	Member, NIH/CDER Technical Advisory Group for a Genome Wide Scan
2009	Member, Special Emphasis Challenge Grant Panel Review Group
2011	Chair, Special Emphasis Panel ZDE1 VH (19), Teleconference Review of U01 and R34 Applications
2012	Chair, Special Emphasis Panel ZDE1 JH (08), Teleconference Review of R34 Applications
2012	Member, Special Emphasis Panel ZDE1VH (04) 2013/0, Teleconference Review of R34 applications
2012	Member, Special Emphasis Panel ZRG1 DIG-A (50) R Meeting for the review of NARCH VII applications
2013	Member, Special Emphasis Panel ZDE1 MH 10 (10) Teleconference Review of R34 and U01 Applications
2014	Member, NIH Director's Transformative Research Award Initiative ZRG1-BCMB-A 51 R, STAGE 2 Mail Reviewer
2016	Member, NIH ZRG1 MOSS-K (11) Special Emphasis Panel Small Business: Oral, Dental and Craniofacial Sciences

2017	Invited Temporary Member, Oral, Dental, and Craniofacial Sciences (ODCS) Study Section
2017	Invited Reviewer NIH ZRG1 MOSS D10 Panel Small Business Grants (Orthopedic, Skeletal Muscle, and Oral Sciences)
<u>Reviewer, Agency for Healthcare Research and Quality (AHRQ)</u>	
2002	Invited Temporary Member, Healthcare Technology and Decision Sciences (HCTDS) Standing Study Section
<u>Reviewer, Health Research Council of New Zealand</u>	
2003	Invited Referee
<u>Reviewer, The Hospital for Sick Children Foundation, Toronto, Canada</u>	
2003	Invited Reviewer
<u>Reviewer, Medical Research Council, United Kingdom</u>	
2004	External Referee
<u>Reviewer, Indiana CTSI Young Investigator Basic Science Award</u>	
2010	Reviewer
<u>Reviewer, Israel Binational Science Foundation</u>	
2012	Reviewer
<u>Contributions to Professional Organizations</u>	
1981 - 1983	ADA Health Foundation Institute Food, Nutrition and Dental Health Program, Plaque Resource Group
1985-	Member of the American Association for Dental Research (AADR) National Affairs Committee Cohorts
1988	Scientific Program Chairman, Winter Meeting of the Rochester Chapter of the AADR
1989	Co-chairman, Cariology Session - Demineralization and Remineralization, IADR Meeting.
1990	Poster Summarizer, Cariology Session - Plaque Bacterial Studies, IADR Meeting
1991	Chairman, Cariology Session - Plaque Metabolism and Enamel Surface Chemistry, IADR Meeting
1992-2001	Scientific Advisor for the American Dental Association Council on Scientific Affairs
1992-1995	Secretary/Treasurer - Cariology Research Group of the IADR
1992-1994	Councilor - Rochester Section of the AADR
1993-1996	President - Rochester Section of the AADR
1994	Chairman, Poster Discussion Session: Tooth Hard Tissues and Re/Demineralization <i>In situ</i> . ORCA Congress, Cork, Ireland.
1995	Program Chair - Cariology Group, AADR Annual Meeting, San Antonio, TX
1995-1996	Councilor - Cariology Research Group of the IADR
1996	Session Chair - Cariology Research Group, <i>Streptococcus mutans</i> , Plaque Composition, IADR Annual Meeting, San Francisco, CA
1996-1997	President - Cariology Research Group of the IADR
1996	Member of the IADR E.W. Borrow Memorial Award Committee
1998-1999	Program Chair - Cariology Group, AADR Annual Meeting, Minneapolis MN
1998-1999	Program Chair - Cariology Group, IADR Annual Meeting, Nice, France
1999-2001	Elected Member European Organization for Caries Research (ORCA) Advisory Board
2001	Chairman, Poster Discussion Session: Clinical and Intervention Studies. ORCA Congress, Graz, Austria
2001-2005	Elected Council Member, Council on Scientific Affairs, American Dental Association
2001	Reviewer of abstracts for the Cariology Research Group Program, IADR 2002 Meeting
2001	Reviewer of abstracts for the Cariology Research Group Program, IADR 2002 Meeting
2001-2002	Member of the ORCA Summer School and Saturday Afternoon Symposium Planning Committee
2002	Session Chair - Cariology Research Group, Fluoride Treatments, Fluorosis, IADR/AADR Annual Meeting, San Diego, CA.
2002-2005	Delegate, International Standards Organization, ISO 106, Working Group 7, representative for ADA Council on Scientific Affairs

2003 Moderator, Workshop On the Safety of Tooth Bleaching Products, Sponsored by the ADA Council on Scientific Affairs

2003 Councilor – AADR Cariology Research Group Chapter

2003 Reviewer Maynard Hine Award, Indiana Section of the AADR

2003-2004 Vice-Chair, Council of Scientific Affairs, American Dental Association

2004 Member, Selection Committee, ADA 2004 Norton M. Ross Award for Excellence in Clinical Research

2004-2005 Chair, Council on Scientific Affairs, American Dental Association

2004-2005 Member, ORCA Congress 2005 Steering Committee

2005 Moderator - Norton M. Ross and ADA Gold Medal Award Winners: Clinical Relevance of Current Oral Health Research. ADA Annual Session, Philadelphia, PA

2005-2006 Member, ADA Expert Panel on Professionally Applied Topical Fluoride, Chicago, IL

2006 Volunteer Grand Awards Judge for Medicine and Health Sciences, Intel International Science and Engineering Fair, Indianapolis, IN

2006-2008 Member, ADA Caries Risk Assessment Workgroup, Council on Dental Practice, Council on Scientific Affairs

2006- Delegate, International Standards Organization, ISO 106, Working Group 7

2007-2009 Member, IADR GlaxoSmithKline Innovation in Oral Care Awards 2008 Review Committee

2008- Scientific Advisor for the American Dental Association Council on Scientific Affairs

2009 Session Chair – Cariology Research Group, Dental Erosion, IADR/AADR Meeting, Miami, FL

2009 Mentor, American College of Dentistry Ethic Dilemmas 3<sup>rd</sup> year dental students

2009-2013 Member, NIDCR CTSA Dental Research Working Group

2010-2016 Member, Indiana Dental Association Drinks Destroy Teeth Campaign Committee

2014-2015 Member, ADA Choosing Wisely Committee

2014-2015 Contributor and Reviewer, FDI Oral Health Atlas second edition: Tooth decay and Caries

2015-2016 Member, Academy of General Dentistry's (AGD) Acid Erosion Guidelines Task Force

2015-2016 Consultant, World Dental Federation for the FDI/Colgate Caries Prevention Partnership

2023 Member, Selection Committee for the ADA 2023 Norton M. Ross Award or Excellence in Clinical Research

2023- Member, IADR Distinguished Scientist Award Committee for the 2024 William H. Bowen Research in Dental Caries Award

**UNIVERSITY SERVICE:**

List committee, administrative, and other University service during the past 20 years.

University of Rochester

1999 Member, Curriculum Committee, Eastman Department of Dentistry, University of Rochester

1999 Chairman, Evidence Based Practice Task Force, Eastman Department of Dentistry, University of Rochester

1996 Member of the Eastman Dental Center/University of Rochester Dental Management Group

1999 Chairman, Clinical Research Advisory Committee, Eastman Department of Dentistry, University of Rochester

1999 Member, Clinical Sciences Research Center Workgroup, University of Rochester Medical Center

1999 Member, Clinical Chiefs Advisory Committee, Eastman Department of Dentistry, University of Rochester

1999 Member, Appointment, Reappointment, Promotion and Tenure Committee, Eastman Department of Dentistry, University of Rochester

1999 Member, Translational Research Search Committee, Eastman Department of Dentistry, University of Rochester

Indiana University

1999-2013 Member, Executive Committee, Indiana University School of Dentistry

1999- Member, IUSD Faculty Council

1999-2013 Member, IUSD Chairs Planning Group

1999-2017 Member, Research Day Planning Committee, IUSD

1999-2001 Member, Curriculum/Assessment Committee, IUSD

2000 Chair, Search & Screen Committee, Assistant Professor position, Dept. Preventive and Community Dentistry

2000 Chair, Search & Screen Committee, Assistant Professor position, Dept. Preventive and Community Dentistry

2000-2001-2008 Member, IUSD Research Committee

2001-2003 Member, Tenure and Promotion Committee, Indiana University School of Dentistry

2001-2003 Member, IUPUI Faculty Council

2001-2003 Chair, Search & Screen Committee, Department of Oral Biology Chair position

2001 Chair, Search & Screen Committee, Associate Professor position, Dept. Preventive and Community Dentistry

2002 Chair, Search & Screen Committee, Assistant Professor position, Dept. Preventive and Community Dentistry

2002-2013 Chair, IUSD Research Committee

2002-2003 Member, Biostatistics Task Force, Indiana University School of Medicine

2002-2013 Member, Council of Associate Deans for Research, IUPUI

2002-2013 Member, IUSD Administrative Advisory Group

2003-2013 Member, Council of Associate Deans for Research, IUPUI

2003-2010 Member, Biostatistics Advisory Committee, Indiana University School of Medicine

2003-2004 Member, Animal Lab Task Force, Indiana University School of Medicine

2003-2005 Member, ORCA 2005 Steering Committee Meeting

2004-2005 Member, IU Future Research Space Working Group (IUPUI Campus)

2005 Chair, Search & Screen Committee, Associate/Professor position, Dept. Preventive and Community Dentistry

2005-2006 Member, Accreditation 2006 Self-Study Standard 1 - Institutional Effectiveness Ad Hoc Committee

2005-2006 Administrative Oversight, Accreditation 2006 Self-Study Standard 6 - Research Program Ad Hoc Committee

2006-2007 Member, New Indiana Continuing Education Advisory Committee, Indiana University School of Dentistry/Indiana Dental Association.

2007 Member, Indiana Clinical and Translational Sciences Application (CTSA) Core Work Group

2007-2008 Member, Search Committee for the IUPUI Vice Chancellor for Research

2007 Co-Chair, IUPUI United Way Key Club

2007 Member, Indiana University Task Force for Research Ethics, Education and Policy

2008-2008-2009 Member, IUPUI Conflict of Interest Committee

2008-2009 Member, Executive Committee, IUPUI United Way Campaign

2008 Co-chair, Key Club of IUPUI United Way Campaign

2008-2009 Member, Search Committee for the Executive Director of Research Ethics, Education, and Policy position in the IU Office of the Vice President for Research

2009 Chair, Key Club of IUPUI United Way Campaign

2010-2014 Co-chair, IUPUI Conflict of Interest Committee

2010 Member, IUSD Strategic Planning Working Group

2011-2013 Member, IUSD DDS Accreditation 2013 Steering Committee

2011-2013 Chair, IUSD DDS Accreditation 2013, Standard 6 (Research) ad hoc Committee

2012-2013 Member, IUPUI Five year review of the IUPUI VC for Research ad hoc Committee

2012-2018 Member, Indiana University Quality Assurance Oversight Committee

2013-2014 Member, IUPUI Innovation & Discovery Task Force

2013-2014 Member, IUPUI Task Force on Sustainability of Research Centers

2013 Member, IU Conflict of Interest-Institutional Review Board Working Subcommittee

2014 Facilitator, Roundtable Discussion on The IUPUI Grand Challenge Initiative (Public Health & Medicine), IUPUI Research Day

2015-2017 Member At-Large, IUPUI Faculty Council

2015-2018-2019 Member, IUSD Promotion and Tenure Committee

2018-2019 Member, Indiana University Office Clinical Research Executive Steering Committee

2020-2023 Interviewer, DDS Candidates for IUSD Admissions Committee

2023 Member, IUSD Alumni Association Distinguished Research Faculty Award Committee

## **OTHER PROFESSIONAL ACTIVITIES**

### International Activities

- 1999 Workshop Session Chair – Modern Methods for Assessing Cariogenicity and Erosion of Foods. Sponsored by the Commonwealth Dental Association, British Dental Association and Leeds University Dental Institute. Hertfordshire, UK.
- 2000 Invited by Dr. Youichi Iijima of the Department of Preventive Dentistry at Nagasaki University to participate as a cooperative researcher with Japanese scientists on the project "Establishment of the Standardized Assessment of Low, Non-Cariogenic Foods and Its Application and Popularization". The Japan Foundation for Emergency Medicine funded the two-week visit to Japan, through a program for the Invitation of Foreign Scientists to Japanese Institutes.
- 2002 Invited attendee at the International Consensus Workshop on Caries Clinical Trials, Glasgow, Scotland.
- 2002 Invited participant, Modern Caries Criteria Development Workshop, sponsored by the Dental Health Services Research Unit, University of Dundee, Dundee, Scotland.
- 2002 Invited participant in the 2<sup>nd</sup> International Caries Detection and Assessment System Workshop, sponsored by the University of Michigan School of Dentistry, University of Michigan, Ann Arbor, MI.
- 2003 Organizer and participant, 3<sup>rd</sup> International Caries Detection and Assessment System Workshop, Indiana University School of Dentistry, Indianapolis, IN.
- 2004 Invited participant, International Standards Organization Meeting, ISO 106, Working Group 7, in Chiang Mai, Thailand.
- 2004 Invited participant, 4<sup>th</sup> International Caries Detection and Assessment System Workshop, sponsored by Department of Cariology, University of Copenhagen, Bornholm, Denmark.
- 2005 Invited Participant International Standards Organization Meeting, ISO 106, Working Group 7, in Rome, Italy
- 2006 Invited participant, 5<sup>th</sup> International Caries Detection and Assessment System Workshop, sponsored by the Dental Health Services Research Unit, University of Dundee, Dundee, Scotland.
- 2007 Invited participant, 6<sup>th</sup> International Caries Detection and Assessment System Workshop, sponsored by the Department of Cariology and Endodontics, University of Copenhagen, Helsingør, Denmark.
- 2008 Invited participant, 7<sup>th</sup> International Caries Detection and Assessment System Workshop, Bogotá, Columbia.
- 2009 Invited participant, 8<sup>th</sup> International Caries Detection and Assessment System Workshop, Budapest, Hungary.
- 2010 Invited participant, ICDAS International Workshop & Symposium on: Clinical Diagnosis & Minimally Invasive Management of Dental Caries, Kornberg School of Dentistry, Temple University, Philadelphia, PA.
- 2011 Invited participant and Working Group Facilitator at the Workshop on "Effective uses of fluoride in Asia" co-sponsored by WHO, FDI and IADR, Phang-nga, Thailand.
- 2012 Invited participant, session moderator and group leader for breakout session, Second International Conference on Novel Anticaries and Remineralizing Agents (ICNARA 2), Viña del Mar, Chile, SA.
- 2013 Invited participant and Home Care Caries Prevention Group Discussion Leader, at International Dental Conference on "Caries Control throughout life in Asia". Organized by Dental Innovation Foundation under Royal Patron, Ministry of Public Health and the Dental Association of Thailand. International Co-hosts WHO, IADR and FDI, Krabi, Thailand.
- 2013 Invited participant, Johnson and Johnson European Advisory Board Meeting, London, England, UK
- 2014 Moderator, Unilever Oral Care Symposium "Erosion – An Everyday Challenge. IADR General Session, Cape Town, South Africa.
- 2014 Chair, Johnson & Johnson Asia Pacific Advisory Board, Hong Kong, China
- 2015 Invited participant, ORCA Workshop on Methodology for Determination of Potentially Available Fluoride in Toothpastes, sponsored by the European Organization for Caries Research (ORCA), Frankfurt, Germany.
- 2015 Invited attendee, The Occasion of the Retirement of JM (Bob) Ten Cate Symposium, Future and Past of Preventive Dentistry, ACTA Dental School, Amsterdam, The Netherlands.

- 2015 Attended the International Caries Detection and Assessment System (ICDAS) Foundation Board Meeting, Heathrow Airport, England, UK
- 2016 Invited participant, FDI/Colgate Caries Prevention Partnership working meeting, London, UK
- 2018 Invited participant, Erosive Tooth Wear Advisory Board meeting, London, UK.
- 2019 Invited participant, Erosive Tooth Wear Advisory Board Workshop, London, UK, Attended by Webex.
- 2020 Invited participant, Erosive Tooth Wear Foundation Industry Advisory Panel Annual Meeting, London, UK, Attended by Webex.
- 2022 Invited participant, Economist Impact Improving Oral Health: Global Opportunity for Levelling Up expert panel meeting, sponsored by Haleon, London, UK, Attended by Zoom
- 2023 Invited participant, Erosive Tooth Wear Advisory Board Workshop, Bogota, Colombia.

Invited Conference/Workshop Participation

- 1990-Sept Panelist, ADA Consensus Conference on Intraoral Models - Patient Selection, Appliance Design, and Substrates
- 1990-Sept Discussion leader, Caries Prevention/Fluoride session, Prevention Revisited Symposium, 75th Anniversary of the Eastman Dental Center
- 1993-Jan. Member, Working Group on "Strategies for Improving the Assessment of Fluoride Accumulation in Body Fluids and Tissues" at the "Methods for Assessing Fluoride Accumulation and Effects in the Body" Workshop, sponsored by the NIDR, Bethesda, MD.
- 1994-Oct. Conference Chair - Conference on the Future Direction of Dental Postgraduate Education: A Tribute to Basil G. Bibby on His 90th Birthday, Eastman Dental Center, Rochester, NY
- 1995-Dec Attended 37th Annual Conference of Dental School Deans on the theme "Thriving in an Emerging Health Care Culture", Boca Raton, FL.
- 1996-June Faculty - 1<sup>st</sup> Annual International Consensus Conference on Dental Risk Assessment and Disease Management, Toronto Canada.
- 1996-July Participated in the 1996 AADS Summer Program - Career Development for Faculty Leaders, Ogunquit, MA.
- 1996-Dec Attended 38th Annual Conference of Dental School Deans on the theme "Contemporary Issues in Higher Education Accreditation".
- 1999-April Invited participant in the Research Diagnostic Criteria of Early Childhood Caries Workshop, sponsored by the National Institute of Dental and Craniofacial Research, Health Resources and Services Administration and Health Care Financing Administration, Bethesda, MD.
- 2001-March Invited presenter at the NIH/NIDCR Consensus Development Conference on Diagnosis and Management of Dental Caries Throughout Life, Bethesda MD.
- 2001-Nov Attended Putting Science into Practice in Dental Schools, Sponsored NIDCR, ADEA, Bethesda, MD.
- 2001-Dec Attended the Dental, Oral and Craniofacial Technology Forum, Sponsored by NIDCR/FDA, Bethesda, MD.
- 2002-Oct Invited participant at the NIDCR Caries Technical Advisory Panel meeting, held at NIH, Bethesda, MD.
- 2004-May Attended, Methods for Enhancing the Efficacy of Dental/Oral Health Clinical Trials Workshop, Sponsored by NIDCR, Bethesda, MD.
- 2005-July Member, Nyvad Criteria Breakout Group, Indiana Conference, Indianapolis, IN
- 2006-Sept Attended, William M. Plater Institute on the Future of Learning, IUPUI, Indianapolis, IN
- 2006-Oct Attended, NIH Conference on Understanding and Reducing Health Disparities Contributions from the Behavioral and Social Sciences, Bethesda, MD.
- 2007-Oct Attended, NIH Regional Consultation Meetings on Peer Review, New York, NY.
- 2008-Aug Invited participant at the ADA Caries Diagnostic Classification Conference, Chicago, IL.
- 2008-Oct Attended the American Society for Microbiology 2<sup>nd</sup> Conference on Beneficial Microbes, San Diego, CA
- 2008-Oct Invited participant at The National Summit on Children's Oral Health: A New Era of Collaboration. Sponsored by the American Academy of Pediatrics, Rosemont, IL.
- 2009-Jan Invited participant to Cariology Expert Colloquium to develop a bio-behavioral-social caries risk assessment model for children under the age of 6. New York, NY.
- 2009-Jan Invited participant and focus group facilitator, Indiana Strategic Oral Health Initiative, Statewide Planning Council Meeting, Indianapolis, IN.

2009-Mar Invited participant GSK Expert Advisory Board Meeting, Weybridge, England, UK.  
2009-Dec Invited participant Colgate/GABA Expert Taskforce Meeting, Geneva, Switzerland.  
2010-Apr Co-organizer and session chair, Colgate/GABA Erosion Workshop, Zurich, Switzerland.  
2010-May Attended, University of Michigan, Ann Arbor Deans Forum, Ann Arbor, Michigan.  
2010-Apr Attended, Indiana Clinical & Translational Research Institute Annual Meeting, Indianapolis, IN.  
2010-Jun Invited participant, Johnson & Johnson Oral Care Advisory Board Meeting, Morris Plains, NJ.  
2010-Aug Invited participant, EBD Expert Panel on Non-Fluoride Caries Preventive Agents, American Dental Association Headquarters, Chicago, IL.  
2010-Sep Attended, NIDCR National Advisory Dental and Craniofacial Research Council, Bethesda, MD  
2014-Nov Attended, Task Force on Design and Analysis in Oral Health Research, Newark Airport, NJ  
2015-Sep Co-Leader and Moderator, FDI-Colgate Caries Prevention Partnership Summit, attended by FDI Executive Committee and Council Members, Bangkok, Thailand.  
2015-Sep Co-Leader and Moderator, FDI-Colgate Caries Prevention Partnership Workshop, attended by FDI Council Members and International experts, Bangkok, Thailand.  
2018-Aug Attended, American Academy of Cariology Board Meeting, Denver, CO.  
2018-Nov Attended, AADR Fall Focused Symposium, Advances in Precision Oral Health Research, NIH, Bethesda, MD  
2019-Mar Working Group Facilitator and Presenter – Adoption of Clinical Evidence-based Guidelines in Teaching and Practice, and Integration into Health Records. At the American Academy of Cariology Annual Meeting (Pre-ADEA) on Challenges and Opportunities for Implementation of Caries Management in Dental Practice and Academia, Chicago, IL  
2019 Apr 03 Moderator and Presenter, US Enamel Erosion Roundtable, GSK Consumer Healthcare, Warren, NJ.

#### Invited Professional Presentations

1977-Jan Fixed vs. Removable Prosthodontics for Replacement of Missing Teeth. Rochester Dental Study Club, Rochester, NY  
1978-Feb Is the Routine Prophylaxis Doing More Harm than Good? Rochester Study Club.  
1981-Jan Salivary Factors as Preventive Agents. Rochester Dental Study Club.  
1981-Mar Management of the Handicapped in the Dental Situation. Monroe Community College, Dental Hygiene Department, Rochester, NY  
1982-Feb Etiology of Dental Caries. Veteran's Administration Hospital, Chesterfield, VA.  
1982-Dec Salivary Pellicle and Dental Caries. Dental Caries Course, Eastman Dental Center, Rochester, NY  
1983-Oct The Impact of Reduced Dental Caries on the Profession. Department of General Dentistry, Reunion, Rochester, NY  
1985-Jan Role of Diet in Dental Caries. Veteran's Administration Hospital, Chesterfield, VA.  
1985-Feb Clinical Cariology. Veteran's Administration Hospital, Chesterfield, VA.  
1986-April Preventive Oral Health Care for the Elderly. Geriatric Dentistry Workshop, Eastman Dental Center.  
1987-April Glucan Mediated Demineralization in vivo by *S. mutans*. Monthly Research Review Meeting, Eastman Dental Center  
1987-Oct Oral Retention of Topical Fluoride and Clinical Efficacy. Monthly Research Review Meeting, Eastman Dental Center.  
1988-May Studies of Caries-Associated Virulence Traits of *Streptococcus mutans* Using an Intraoral Model. Streptococcal Research Day, University of Rochester, School of Medicine and Dentistry.  
1988-June Oral Retention of Topical Fluoride and Clinical Efficacy. Lakeside Dental Study Club, Rochester, NY  
1988-Sept Oral Retention of Topical Fluoride. Department of Clinical Dentistry, University of Rochester.  
1988-Dec Intraoral Model to Study Dental Caries. Lakeside Dental Study Club, Rochester, NY  
1989-Oct Intraoral Studies. Monthly Research Review Meeting, Eastman Dental Center.  
1989-Oct Fluoride Retention in the Mouth and Caries Prevention. Alpha Omega Fraternity Study Club, Rochester, NY  
1990-Feb Study of Caries Associated Virulence of Mutans Streptococci Using an Intraoral Model. Cariology Center Seminars, University of Rochester.  
1990-Feb Study of Caries Associated Virulence of Mutans Streptococci Using an Intraoral Model. Keynote speaker Winter Meeting of the Rochester Chapter of the AADR.



- 1990-Apr The Use of Intraoral Models in Dental Research. International Life Sciences Institute-Nutrition Foundation, Washington, DC
- 1990-June Improved Intraoral Enamel Demineralization Test Caries Model. Technological Advances in Intraoral Model Systems Used to Assess Cariogenicity. ADA, Chicago, IL.
- 1990-July Latest Understanding of the Mechanism of Action of Fluoride in Caries Prevention. Dental School of the University of Francisco, Marroquin, Guatemala.
- 1990-Sept Use of Intraoral Models in Caries Research. Buonocore Memorial Lecture, Apolonia Society, Rochester, NY.
- 1990-Sept The Use of the Intraoral Enamel Demineralization Test in Caries Research. American Dental Association Health Foundation, Paffenbarger Center at the National Institute of Standards and Technology, Gaithersburg, MD.
- 1991-June Adaptations in Dental Plaque, Cariology for the Nineties Conference. University of Rochester, Rochester, NY.
- 1991-Nov The Use of Intraoral Models in Caries Research. Monthly Research Review Meeting, Eastman Dental Center.
- 1991-Dec Reflections on General Dentistry. Commencement Speech for the General Dentistry Residents, Eastman Dental Center.
- 1992-June Intraoral Caries Models. Symposium on Modern Concepts of Prevention. Leeds Dental Institute, University of Leeds, England.
- 1992-Oct The Use of *in situ* Models to Study Basic and Applied Aspects of Dental Caries. Department of Oral Biology Seminar Series. University at Buffalo, SUNY.
- 1992-Nov Evaluation of the Caries-Associated Virulence of *Streptococcus mutans* Using an Intraoral Model. Unilever Research Port Sunlight Laboratory, England.
- 1993-Jan Topical Fluorides - Recommendations for Their Proper Use. Rochester Dental Study Club, Rochester, NY.
- 1993-Apr Studies at the Eastman Dental Center - Comparison of Model Systems. Impact of Chewing Gum on Dental Health: Expert Review and Update. Sponsored by the Warner-Lambert Company, Summit, NJ.
- 1993-May Nutrition and Dental Caries. Continuing Education course for nutritionists and dietitians. Sponsored by the Michigan Dairy Council, Ann Arbor, MI.
- 1993-May Dental Caries and Their Relationship to Foods. Applied Nutrition 726 course for 3rd year dental students. The University of Michigan, School of Dentistry, Department of Cariology and General Dentistry, Ann Arbor, MI.
- 1993-May Role of Diet in the Etiology and Prevention of Dental Caries. Continuing education course to practicing dentists. Sponsored by the National Dairy Council's Visiting Professorship Program, Ann Arbor, MI.
- 1993-Oct Clinical Usefulness of Professionally-applied Topical Fluorides. Blue Shield Dental Advisory Board, Rochester, NY
- 1993-Oct Microbiology of Dental Caries. Pediatric Dentistry Seminar Series, University of Connecticut Health Center.
- 1994-Mar The Use of Intra-oral Models in Caries Research. Lunch and Learning session at the IADR/AADR, Seattle, WA.
- 1994-Mar Mechanism of Dental Caries. Intra-oral Models of Caries. Oral Microbial Ecology Course to Graduate Students. School of Dental Medicine, Department of Oral Biology, University of Buffalo, SUNY, Buffalo, NY.
- 1994-June *In situ* Caries Models. Conference on Clinical Aspects of De/Remineralization of Teeth. Rochester, NY.
- 1994-July Biochemical and Microbiological Aspects of Dental Plaque in Occlusal Surfaces. Symposium on the Treatment of Initial Caries Lesions in Occlusal Surfaces. 10th Congresso Odontologico Riograndense, 1st Encontro Gaucho de Odontologia Preventia. Sponsored by the Associacao Brasileira de Odontologia, Porto Alegre, Brazil.
- 1994-July 12 hour course on Cariology: Etiology and Prevention. 10th Congresso Odontologico Riograndense, 1st Encontro Gaucho de Odontologia Preventia. Sponsored by the Associacao Brasileira de Odontologia, Porto Alegre, Brazil.
- 1995-March An Overview of Caries Risk Assessment, and Its Potential Utility. Symposium on "Developing Clinical Teaching Methods for Caries Risk Assessment", American Association for Dental Research Meeting, San Antonio, TX.

- 1995-May Update on Fluoride Use in Dentistry. General Dentistry Alumni Reunion, Eastman Dental Center, Rochester, NY.
- 1995-July The Use of *In situ* Models in the Evaluation of Fluoride Dentifrice Products. Colgate Palmolive Company, Piscataway, NJ.
- 1995-Sept Etiology of Dental Erosion - Extrinsic Factors. Workshop on the Etiology, Mechanisms and Implications of Dental Erosion, Sponsored by ILSI Europe and ILSI North America, Limelette, Belgium.
- 1995-Oct. Use of *In situ* Models in the Study of Dental Caries. Division of Oral Biology Seminar Series, Goldman School of Graduate Dentistry, Boston University, MA.
- 1995-Nov Validation of *In situ* Models Revisited! Task Force on Design and Analysis, Inc., Newark, NJ.
- 1996-June The Changing Boundaries of Dental Caries Diagnosis and Intervention. First International Consensus Conference on Dental Risk Assessment and Disease Management, Toronto, Canada.
- 1996-Oct Use of *In situ* Models in Caries Research. Dental Research Seminar Series, University of Medicine and Dentistry of New Jersey, Graduate School of Biomedical Sciences, Newark, NJ.
- 1996-Nov Update on the Clinical Use of Fluorides in Dentistry. Incisive Seminars of Rochester, Study Club, Rochester, NY.
- 1997-Nov Comparison of Decision Rules for Approving Anticaries Drug Products. Task Force on Design and Analysis, Inc., Newark, NJ.
- 1998-April Overview of Dental Erosion. The Gatorade Company, Gatorade Exercise Physiology Laboratory, Barrington, IL.
- 1998-Nov Aetiology of Enamel Erosion - Intrinsic and Extrinsic Factors. Council of Europe Meeting on the Topic of "Tooth Wear and Sensitivity", Bristol, England.
- 1999-Feb Overview of the Factors Influencing Topical Fluoride Oral Clearance/Retention. Warner-Lambert Company, Morris Plains, NJ.
- 1999-May Caries Detection Using Digital Imaging Fiber-Optic Transillumination (DIFOTI™) - A Preliminary Evaluation. 4<sup>th</sup> Annual Indiana Conference. Early Detection of Dental Caries II, Indianapolis, IN.
- 1999-Sept Overview of *In situ* Models Used in Dental Research. Seminar Series - Indiana Section of the American Association for Dental Research, Indianapolis, IN.
- 2000-Mar Future Advances in Caries Research Through Clinical Investigations. IADR Symposium: An Agenda for Dental Caries Research in the 21<sup>st</sup> Century, Washington DC.
- 2000-May Overview of Research Capabilities of the Oral Health Research Institute. Warner Lambert Learning Center, Morris Plains, NJ.
- 2000-June Oral Factors to Consider that Influence Restorative Treatment. 5<sup>th</sup> Annual Indiana Conference. The Changing Practice of Restorative Dentistry, Indianapolis, IN.
- 2000-Oct Erosion Research. Martin Curzon Retirement Symposium on Industrial Partnership, Research Direction and Clinical Excellence in the Millennium, Leeds, England, UK.
- 2000-Nov Current Concepts in Cariology. A Fluoride and Cariology Symposium sponsored by the Indiana School of Dentistry and The Indiana State Department of Health, Indianapolis, IN.
- 2000-Dec Evaluation of the Cariogenicity of Foods Using Various Model Systems. Presented at the meeting of the Advisory Board of the "Establishment of the Standardized Assessment of Low, Non-Cariogenic Foods and Its Application and Popularization" project, Center for Disease Control, Tokyo, Japan.
- 2000-Dec Role of Diet in Dental Caries. Presented to 5<sup>th</sup> Year Dental Students at Nagasaki University School of Dentistry, Nagasaki, Japan.
- 2000-Dec Early Caries Detection and Management. Presented to the Faculty of Nagasaki University School of Dentistry, Nagasaki, Japan.
- 2001-Mar Clinical Applications and Outcomes of Using Indicators of Risk in Caries Management. Presented at the NIH/NIDCR Consensus Development Conference on Diagnosis and Management of Dental Caries Throughout Life, Bethesda MD.
- 2001- June Chewing Gum, Salivary Stimulation and Remineralization. IADR Symposium: Chewing Gum and Oral Health, Chiba, Japan.
- 2001-Nov *In situ* Models [In light of the FDA call for data]. Presented NJ Section of AADR, Parsippany, NJ.
- 2002-Mar An Overview of *In situ* Models for Cariogenicity Research. IADR Symposium: *In situ* Models for the Study of Caries and Erosion, San Diego, CA.

2002-June New CDC Guidelines: Do You Know How to Assess Your Patient's Fluoride Needs? Co-presented with Karen M. Yoder. IUSD Center for Advanced Professional Studies, Indianapolis, IN.

2002-Sept Mechanism of Action of Fluoride and other Trace Elements, Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.

2002-Nov Overview of the Dental Caries Process; With Special Emphasis on the Role of Saliva. Presented as part of a CE course – Saliva ...You Can't Do Without It. IUSD Center for Advanced Professional Studies, Indianapolis, IN.

2003-July Sugars – the Arch Criminal? Presented at the 50<sup>th</sup> Anniversary Congress of the European Organization of Caries Research (ORCA): Cariology in the 21<sup>st</sup> Century, State of the Art and Future Perspectives, Konstanz, Germany.

2004-Mar Diagnosis and Management of Dental Caries in the 21<sup>st</sup> Century. Presented to the Pittsburgh Academy of Dentistry as a 6 hr. lecture series, Pittsburgh, PA.

2004-May Overview of the Role of Dental Plaque Biofilms in Dental Caries. Presented at Biocomplexity VI: Complex Behavior in Unicellular Organisms, Indiana University Bloomington, Bloomington IN.

2004- July Ethical Issues in Clinical Research. Presented at part of the Program for the ORCA Summer School on The Conduct, Interpretation and Publication of Clinical Research, Good Clinical Practice and Statistics, Marburg, Germany.

2004-Sept The Ethical Conduct of Industry-sponsored Research. Presented as a workshop at the IUSD Fall Faculty Conference, Spencer, IN.

2004-Oct Mechanism of Action of Fluoride, Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.

2004-Dec Mineralized Tissues – The Exposed Root surface in an Ageing Population. Presented at the GSK New Horizons in Oral Care Advisory Board meeting, Philadelphia, PA.

2005-Feb Introduction of Dentistry. Presented during Orchard School Career Day, Indianapolis, IN.

2005-Feb Role of Fluoride in Managing Hyposalivation-induced Dental Caries. Presented at the GSK Saliva/Dry Mouth Advisory Board Meeting, Philadelphia, PA.

2005-Mar What Does CSA Need from the ADA SCDP for the Future? Presented at the ADA Standards Committee on Dental Products/US TAG: Standards Summit for the Dental Profession meeting. Baltimore, MD.

2005-Mar A Perspective on the Present and Future Management of Dental Caries. Presented at IADR Symposium “Examining the Role of Caries-prevention Regimens and Restorative Materials in Meeting National Health Objectives for Dental Caries”, Baltimore, MD.

2005-Mar Assessing Clinical Caries Lesion Activity - Parallel Research. Presented at the International Caries Detection and Assessment System Workshop sponsored by the National Institute of Dental and Craniofacial Research, the American Dental Association, and the International Association for Dental Research, Baltimore, MD.

2005-Mar Diagnosis and Management of Dental Erosion. Presented at the Maynard K. Hine Scholarship Lecture Series on Non-Traditional Dental Diseases and Etiology, sponsored by the Indian Section of the American College of Dentists and IUSD, Indianapolis, IN.

2005-April Early Caries Detection. Research Seminar Series. University of Kentucky, College of Dentistry, Lexington, KY.

2005-April Saliva as a Protective Agent. OBI 829 Oral Biology course for 2<sup>nd</sup> year dental students. University of Kentucky, College of Dentistry, Lexington, KY.

2005-April Caries Risk Assessment and Prevention. OBI 829 Oral Biology course for 2<sup>nd</sup> year dental students. University of Kentucky, College of Dentistry, Lexington, KY.

2005-May Early Caries Detection and Management. Presented to the 3M ESPE Dental Products Division, Minneapolis, MN.

2005-June Dentifrices, Mouthwashes, Remineralization/Caries Arrestment Strategies. Presented at the NIDR sponsored Biotechnology and Materials Research to Reduce Caries Epidemic Conference, Seattle, WA.

2005-Aug Caries Prevention and Control for Dry Mouth Patients. Presented at the GlaxoSmithKline Symposium – Dry Mouth - Successful Management in Everyday General Dental Practice, FDI World Dental Conference, Montreal, Canada.

2005-Aug Erosion – Chemical and Biological Factors of Importance to the Dental Practitioner. Presented at the GlaxoSmithKline Symposium – Worn Out and Hypersensitive! A Fresh Look at Erosion and Abrasion, FDI World Dental Conference, Montreal, Canada.

2005-Sept Impact of Soft Drink Consumption on Dental Health. Presented to the Indiana State Legislature, Indiana Health Finance Commission, Indiana State House, Indianapolis, IN.

2005-Oct Early Caries Management. Presented at the ADA Annual Session 2005 at the Early Caries Diagnosis and Management Course, Philadelphia, PA.

2005-Oct Mechanism of Action of Fluoride, Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.

2005-Nov Use of Dental Sealants in the Management of Early Caries, Visiting Lecturer Series New York University College of Dentistry, New York, NY.

2006-Feb Diagnosis and Management of Dental Erosion. Presented to the West Central Dental Society, Lafayette, IN.

2006-June Erosive Potential of Calcium-Containing Acidic Beverages, Gatorade Sports Science Institute Dental Summit, Barrington, IL.

2006-Sept Hot Topics in Dentistry. Presented at the Retirees Breakfast, Indianapolis District Dental Society. Indianapolis, IN.

2006-July A Perspective on the Present and Future Management of (Early) Dental Caries. Seminar presented at the NIH/NIDCR, Bethesda, MD.

2006-Oct Mechanism of Action of Fluoride, Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.

2007-Jan Enamel Brief. Presented at the GSK Ideation Meeting. Morristown, NJ.

2007-Feb A Perspective on the Present and Future Management of (Early) Dental Caries. Seminar presented at the UCSF School of Dentistry, San Francisco, CA.

2007-Mar New Perspectives on Cariogenesis: Implications for Anthropological and Epidemiological Research. Presented at the 76<sup>th</sup> Annual Meeting of the American Association of Physical Anthropologists - Symposium on Recent Advances in Understanding Oral Pathology: Clinical, Evolutionary and Prehistoric Perspectives on Sex and Status Differences.

2007-June Assessment and Management of the High Caries Risk Patient. Presented at The John F. Johnston Society Refresher Course Contemporary Prosthodontics Update, Indianapolis, IN.

2007-June A Perspective on the Present and Future Management of (Early) Dental Caries. Presented at the Forsythe Institute Thursday Seminar Series, Boston, MA.

2007-Aug Anatomically Are the Primary Dentition More Susceptible to Erosive Tooth Wear than the Secondary Dentition. Presented at the GSK Expert Panel Meeting to Discuss Tooth Wear/Erosion in Children. Weybridge England UK.

2007-Oct Mechanism of Action of Fluoride, Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.

2007-Oct Demineralization/Remineralization of Orthodontically Treated Teeth - Indianapolis Orthodontic Study Club, Indianapolis, IN.

2007-Oct The Use of Early Detection and Risk Assessment in the Management of Dental Caries. Indiana University School of Dentistry Continuing Education. Co-presented with Dr. A. Ferreira Zandona and Dr. M. Fontana, Indianapolis, IN.

2007-Nov New Methods of Detecting Dental Caries. Presented at the University of Rochester Dentistry's All Alumni Reunion 2007, Lifetime Education - Lifetime Connections, Division of General Dentistry Session, Fort Myers, FL.

2008-Jan Recaldent – Evidence for Clinical Activity Reactor Presentation. International Conference on Novel Anticaries and Remineralizing Agents (ICNARA), Vina del Mar, Chile.

2008-Feb Poster on the Oral Health Research Institute presented at the IU Life Sciences/Hoosiers for Higher Education Day at the Statehouse, Indianapolis, IN.

2008-Apr Keynote Address: Improvements in Clinical Diagnosis and Management of Caries. Presented at the American Association for Dental Research Annual Meeting, Dallas, TX.

2008-May Detection and Management of (Early) Dental Caries. Presented at the Dean's Seminar, Stony Brook University School of Dental Medicine, Stony Brook, NY.

2008-June Regulation and Marketing of US Dental Products: The Case of Remineralizing Pastes. Presented at Brown Bag Seminar hosted by the Northwest/Alaska Center to Reduce Oral Health Disparities, University of Washington, Seattle WA.

- 2008-Aug Demineralization/Remineralization of Orthodontically Treated Teeth. Presented at the Alamo Study Group Meeting, San Antonio, TX.
- 2008-Aug Diagnosis and Management of Early Dental Caries. Presented at the University of Texas Health Science Center at San Antonio Dental School Grand Rounds, San Antonio, TX.
- 2008-Aug Modern Management of Caries as a Dynamic Disease Process. Keynote lecture presented at the San Antonio PBRN White Spots symposium. San Antonio, TX.
- 2008-Sep Applications of *in situ* Models to the Study of Dental Erosion/Abrasion. Presented at "Recent Developments in Tooth Wear and Erosion Symposium", Pan European Federation of the International Association for Dental Research Annual, London, England.
- 2008-Sep Mechanism of Action of Fluoride, Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.
- 2008-Nov Management of Orthodontic Bracket White Spot Lesions. Sadler Orthodontics, Inc. CE presentation, Fischer, IN.
- 2008-Nov Management of Early Caries Lesions. Presented at the Indianapolis District Dental Society (IDDS) President's Fall Workshop, Indianapolis, IN.
- 2008-Dec Etiology and Pathogenesis of Dental Caries. Presented at the ICDAS-Group Modern Management of Dental Caries Course, Universidad El Bosque, Bogotá, Columbia.
- 2008-Dec ICDAS in the Future: How It Can (Will) Improve Oral Health. Presented at the ICDAS Education and Public Health Matters Symposium, Bogotá, Columbia.
- 2009-Feb Keynote address, Cariology: The Heart of Dentistry in Search of its Soul. Presented at The 2009 Clinic and Research Day, University of Illinois at Chicago, College of Dentistry, Chicago, IL.
- 2009-Feb Management of Early Caries. Presented at Cariology Research Group, Special Seminar, University of Illinois at Chicago, College of Dentistry, Chicago, IL.
- 2009-Feb Experimental Caries Models and Their Use in the Study of New Anticaries Technologies. Presented at Johnson & Johnson Consumer and Personal Products Worldwide Facility, Morris Plains, NJ.
- 2009-Mar Defining Erosive Toothwear (Acid Erosion). Presented at the Acid Erosion in Children Roundtable Sponsored by GlaxoSmithKline, Chicago, IL.
- 2009-Apr The Importance of Brushing Behavior: Effect of Brushing Time and Amount on Fluoride Performance From Dentifrices In Situ. Presented at Getting the Best from Fluoride Dentifrices: New Insights on the Importance of Behaviour and Design (GlaxoSmithKline-sponsored symposium), IADR meeting, Miami, FL.
- 2009-Jul Strengths and Limitations of In situ Models for Measuring Effectiveness of Fluoride-containing Toothpastes. Presented at the ORCA Saturday Afternoon Symposium on The Effective Use of Effective Fluoride Toothpastes for Caries Control, Budapest, Hungary.
- 2009-Aug Diagnosis, Risk Assessment and Management of Dental Caries and Dental Erosion. Eight-hour course presented at the meeting of O Centro Internacional de Ensino e Pesquisas Avancadas em Saude, Sao Paulo, Brazil.
- 2009-Aug The Use of In situ Caries Models in Oral Microbiology. Presented at the State University of Campinas, Piracicaba Dental School, as part of their Visiting Scientists Program, Piracicaba, Brazil.
- 2009-Aug Diagnosis and Management of Dental Erosion. Mini Course Presented at the State University of Campinas, Piracicaba Dental School, as part of their Visiting Scientists Program, Piracicaba, Brazil.
- 2009-Sep Oral Health Management of Head & Neck Cancer Patients: Good News Bad News. Presented to the Cancer Control Group at the IU Simon Cancer Center, Indianapolis, IN.
- 2009-Nov Dental Lesion of Bacterial and Non Bacterial Etiology: Dental Caries and Erosion. Eight hour course presented at the Asociación Odontológica Argentina 35 Jornadas Internacionales, Buenos Aires, Argentina.
- 2010-Feb Cariology: The Heart of Dentistry in Search of its Soul. Presented at Indiana University School of Dentistry as part of the Faculty Enrichment Program.
- 2010-Feb Overview of the Research Capabilities of the Oral Health Research Institute. Presented at the Procter and Gamble Health Care Research Center, Mason, OH.
- 2010- Mar Keynote Address: Demineralization/Remineralization of Orthodontically Treated Teeth. Presented at Northwest Practice-based Research Collaborative in Evidence-based Dentistry Fifth Annual Meeting, Seattle, WA.

- 2010-Apr Issues for the Patient Caries Risk Assessment, Behaviors and Perspectives. Presented at the ICDAS International Workshop & Symposium on: Clinical Diagnosis & Minimally Invasive Management of Dental Caries, Kornberg School of Dentistry, Temple University, Philadelphia, PA.
- 2010-May Demineralization/Remineralization of Orthodontically-Treated Teeth. Presented at the 110th Annual Session American Association of Orthodontists, Washington, DC.
- 2010-Jul The Role of Fluoride in Mouthrinses. Presented at the Johnson & Johnson Advisory Panel Meeting on Post-brushing Rinsing Behavior, Barcelona, Spain.
- 2010-Oct Understanding the Biochemistry of Dental Erosion. Presented at the 1<sup>st</sup> International Meeting "Erosion 2010", Bauru School of Dentistry-USP-Brazil.
- 2010-Oct The Impact of Behavioral Factors and Systemic Diseases on Prevalence of Dental Erosion. Presented at the 1<sup>st</sup> International Meeting "Erosion 2010", Bauru School of Dentistry-USP-Brazil.
- 2010-Nov Mechanism of Action of Fluoride. Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.
- 2011-Mar Scientific Rationale of Fluoride Mouthrinse in Caries Prevention. Presented at the Expert Panel Meeting - Fluoride Mouthrinse for Superior Oral Health, Phang-nga, Thailand.
- 2011-Mar Scientific Rationale of Fluoride in Caries Control. Presented at the Workshop on "Effective uses of fluoride in Asia" co-sponsored by WHO, FDI and IADR, Phang-nga, Thailand.
- 2011-Mar Modern Management of Caries as a Dynamic Disease Process. Presented at Faculty of Dentistry, Mahidol University, Bangkok, Thailand.
- 2011-Mar Modern Management of Caries as a Dynamic Disease Process. Presented at Faculty of Dentistry, Chulalongkorn University, Bangkok, Thailand.
- 2011-Mar Modern Management of Caries as a Dynamic Disease Process. Presented at a Meeting of the Singapore Dental Association, Singapore.
- 2011-Mar Modern Management of Caries as a Dynamic Disease Process. Presented at University Malaya, Kuala Lumpur, Malaysia.
- 2011-Mar A Perspective on the Present and Future Management of (Early) Dental Caries. Presented at University Kebangsaan Malaysia, Kuala Lumpur, Malaysia.
- 2011-Jul In situ Models: The Bridge between Clinical Dentistry and the Research Laboratory. Presented at the 2<sup>nd</sup> Worldwide Universities Network Symposium in Oral Health Sciences 'Translational Research in Dentistry', University of Leeds, England, UK.
- 2011-Nov Mechanism of Action of Fluoride, Postgraduate Cariology Course, University of Rochester Medical Center, Rochester, NY.
- 2011-Nov Enamel Remineralization: A Realistic Goal for Product Development? Presented at the Task Force on Design and Analysis in Oral Health Research meeting, Newark, NJ
- 2012-Jan Effectiveness and Safety of Water Fluoridation. Presented at a meeting of the Town Council, Plainfield, IN.
- 2012-Mar A Multi-Center Clinical Study to Evaluate the Safety and Efficacy of the Use of Ozone for the Management of Fissure Caries. Presented at the Non-fluoride Approaches to Caries Prevention AADR Symposium. Tampa, FL.
- 2012-May Overview Caries Process and the New Models for Management of Caries. Presented at the Caries Management Pathways (CMP) - A Roadmap for Clinicians and Educators Conference, Hosted by Temple University Maurice H. Kornberg School of Dentistry, Philadelphia, PA
- 2012-Jul Introduction and Overview of Caries Management. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise
- 2012-Jul Fundamentals of Dental Caries. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise
- 2012-Jul Caries Diagnosis: Caries Lesion Detection and Assessment. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise
- 2012-Jul Caries Risk Assessment. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise
- 2012-Jul Caries Preventive Measures: Fluoride. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise
- 2012-Jul Caries Preventive Measures: Dental Sealants, Plaque Control, Dietary Measures, Non-Fluoride Remineralizing Agents. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise

- 2012-Jul Caries Management – Treatment Planning. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise
- 2012-Jul Diagnosis and Management of Dental Erosion. Presented on the Indiana University School of Dentistry Alumni Alaskan Cruise
- 2012-Oct Update on Caries Management. Presented at the Eastman Institute for Oral Health Scientific Program during the Alumni & Friends Reunion, Rochester, NY.
- 2012-Oct Fluoride and Prevention of Dental Caries. Postgraduate Cariology Course ORB 580, University of Rochester Medical Center, Rochester, NY.
- 2012-Oct Evidence-Based Caries Prevention Strategies: Fluoride, Sealants, Xylitol and Chlorhexidine. CE course co-presented with Dr. Frantsve Hawley at the ADA Annual Session, San Francisco, CA.
- 2013-Jan Evidence Based Caries Management. Mini-CE Course presented to the Isaac Knapp District Dental Society, Fort Wayne, IN.
- 2013-Apr Dental Caries and the Medically Compromised Patient. Presented at the Curacao 1e Tandheelkunde Congres “Medisch- Tandheelkundige interacties” to medical and dental healthcare providers, Curacao.
- 2013-Apr Management of Dental Caries. Presented at the Curacao 1e Tandheelkunde Congres “Medisch- Tandheelkundige interacties” to medical and dental healthcare providers, Curacao.
- 2013-May Evidence-based Management of Early Cariious Lesions. Half-day presentation to the University of Missouri-Kansas City School of Dentistry faculty, Kansas City, MO.
- 2013-May Synergix Caries Risk Software. Presented to executive members of the American Academy of Pediatric Dentistry at their Annual Meeting, Orlando, FL.
- 2013-Sep Future Scientific Needs and Technologies for Enamel Health: Improving Anticaries/erosion Benefits. Presented at the Unilever Enamel Mineralisation Workshop, Shanghai, China
- 2013-Oct Diagnosis and Management of Dental Erosion. Co-presented as a CE Course with Dr. Anderson Hara as part of the IUSD CE Program Faculty Focus Series, Indianapolis, IN.
- 2013-Oct Fluoride and Prevention of Dental Caries. Postgraduate Cariology Course ORB 580, University of Rochester Medical Center, Rochester, NY.
- 2013-Oct Fluoride in Dentistry. Presented as a CE Course to dentists and dental hygienists, Sakura, Chiba Prefecture, Japan.
- 2013-Oct Modern Management of Dental Caries. Presented at the Japan Health Care Dental Association “Health Care Meeting 2013” meeting, Tokyo, Japan.
- 2013-Oct Low vs. High Concentration Fluoride. Presented to faculty, students and industry representatives at Tsurumi University School of Dental Medicine, Yokohama, Japan.
- 2013-Nov Evidence-Based Caries Preventive Strategies. CE course co-presented with Dr. Julie Frantsve Hawley at the ADA Annual Meeting, New Orleans, LA.
- 2013-Nov Fluoride Mouthrinse in Caries Control throughout Life. Presented at an Expert Panel Meeting involving 20 Asian countries sponsored by Johnson & Johnson, Krabi, Thailand.
- 2013-Nov Cariology Research Update. Presented at International Dental Conference on “Caries Control throughout life in Asia”. Organized by Dental Innovation Foundation under Royal Patron, Ministry of Public Health and the Dental Association of Thailand. International Co-hosts WHO, IADR and FDI, Krabi, Thailand.
- 2013-Nov Clinical Use of fluoride in Caries Prevention - an Update. Presented at the Taipei Dental Association Annual Meeting. Taipei, Taiwan.
- 2013-Nov Clinical Use of fluoride in Caries Prevention - an Update. Presented to faculty and students at the Taiwan National Defense Medical Center, Taipei, Taiwan.
- 2013-Nov Advances in Science and Technology of Caries Prevention. Presented at the “2013 Thailand International Dental Congress: Celebrating Modern Dentistry in the Land of Smile”, Bangkok, Thailand.
- 2013-Nov Fluoride Mouthrinses in Caries Prevention: Past, Current and Future. Presented at Lunch Symposium at the “2013 Thailand International Dental Congress: Celebrating Modern Dentistry in the Land of Smile” Sponsored by Johnson and Johnson, Bangkok, Thailand.
- 2014-Aug Modern Management of Caries as a Dynamic Disease Process. Presented at the Hong Kong International Dental Expo And Symposium, Hong Kong.
- 2014-Aug Fluoride Mouthrinse in Caries Prevention – Past, Current and Future. Presented to local dental professionals at the J&J Caries & Fluoride Symposium, Hong Kong.

- 2014-Aug Cariology: The Heart of Dentistry In Search of Its Soul. Presented at the The Biennial Conference of the Pediatric Dentistry Association of Asia, Singapore.
- 2014-Aug Symposium Summary. Pediatric Dentistry Association of Asia Symposium "Caries Preventive Program in Asia- from Infancy to Adolescence", Singapore.
- 2014-Aug Modern Management of Caries as a Dynamic Process Disease. Presented at the Faculty of Dentistry, National University of Singapore, Singapore
- 2014-Aug Modern Management of Caries as a Dynamic Process Disease. Lecture series sponsored by Johnson & Johnson Pacific presented to dental professionals in Melbourne, Sydney and Brisbane, Australia.
- 2014-Aug Evidence-Based Caries Prevention Strategies. Presented to faculty from Filipino Dental Schools as part of a Development Program for the International College of Dentists. Manila, Philippines.
- 2014-Sep Evidence-Based Caries Prevention Strategies. Presented to dental professionals at the Philippine Pediatric Dental Society's Quarterly Seminar, Manila, Philippines.
- 2014-Sep Evidence-based Management of Early Carious Lesions. Presented at the FDI Annual World Dental Congress, NCR New Delhi, India.
- 2014-Sep Caries Prevention: Putting It All Together. Presented at Year in Review on Prevention Symposium at the FDI Annual World Dental Congress, NCR New Delhi, India.
- 2014-Sep Science/Evidence-based Diagnosis and Management of Dental Caries. Presented at the International Congress of Pediatric Dentistry, Universidad de Guadalajara, Guadalajara Mexico
- 2014-Sep Diagnosis and Management of Dental Erosion. Presented at the International Congress of Pediatric Dentistry, Universidad de Guadalajara, Guadalajara Mexico
- 2014-Oct Fluoride and Prevention of Dental Caries. Postgraduate Cariology Course ORB 580, University of Rochester Medical Center, Rochester, NY.
- 2015-Apr 13 Regulatory and Commercialization Perspectives, Presented at the NIDCR Workshop on Remineralization: Current State of Science and Future Directions, Bethesda, MD.
- 2015-Sep 21 Aetiology, Pathogenesis and Risk Assessment - Science informing Practice. Presented at the FDI-Colgate Caries Prevention Partnership Summit to FDI Executive Leadership, Bangkok, Thailand.
- 2015-Sep 25 Way to Interpret Research Data to Promote Health Education: A New Meta-analysis. Presented at FDI World Dental Congress Symposium on Promoting Self Care through Evidence, Bangkok, Thailand.
- 2015-Sep 25 Self-Care for Optimal Oral Health: Review of Evidence. Presented at FDI World Dental Congress Symposium on Promoting Self Care through Evidence, Bangkok, Thailand.
- 2015-Oct 08 Modern Management of Caries as a Dynamic Disease Process. Presented at the Research Seminar Series, School of Dental Medicine University of Pennsylvania, Philadelphia, PA.
- 2015-Oct 12 Fluoride Mechanism of Action. Postgraduate Cariology Course ORB 580, Eastman Institute for Oral Health, University of Rochester, Rochester, NY.
- 2015-Dec 09 Oral Health Management of Head & Neck Cancer Patients. Presented at the Cancer Control meeting, IU Health Melvin and Bren Simon Cancer Center, Indianapolis, IN.
- 2016 Feb 02 Does Our Current Approach to Caries Prevention and Control Strategies Integrate a Sufficiently Broad Range of Evidence? Perspective from Cariology. Presented at the Alliance for a Cavity-Free Future Global Symposium 2016, held in conjunction with the 20th UAE International Dental Conference and Arab Dental Exhibition, Dubai UAE.
- 2016 Apr 04 Strength of Dental Caries Evidence Used to Formulate Recommendations for Dietary Sugars Intake. Presented at the American Society for Nutrition Experimental Biology Meeting Symposium Health Recommendations for Dietary Sugars: Why Can't We All Agree, San Diego, CA.
- 2016 Jun 15 Management of Caries as a Dynamic Disease Process. Webinar presented through the Colgate Oral Health Network website.  
<http://www.colgateoralhealthnetwork.com/webinar/management-of-caries-as-a-dynamic-disease-process/>
- 2016 Sep 26 Fluoride and Prevention of Dental Caries. Postgraduate Cariology Course ORB 580, Eastman Institute for Oral Health, University of Rochester, Rochester, NY.
- 2017 Apr 01 Oral Manifestations of Sjögren's and their Management. Presented at the Sjögren's Syndrome Foundation's 2017 National Patient Conference, Cherry Hill, New Jersey.
- 2017 Apr 06 Cariology the Heart of Dentistry in Search for Its Soul. Keynote Address Presented at VCU School of Dentistry Research Day, Richmond, VA.



- 2017 Jun 09 Disruptive Innovations Necessary to Change How We Manage Dental Caries. Presented at The Future Starts Now Scientific Symposium, Caries Prevention & Community Health Session, Eastman Institute for Oral Health Centennial Celebration, Rochester, NY.
- 2017 Jun 09 The Use of Caries Detection Devices. Presented at The Future Starts Now Scientific Symposium, New Devices, Technology and Medications Session, Eastman Institute for Oral Health Centennial Celebration, Rochester, NY.
- 2017 Jul 27 Oral Manifestations of Sjögren's and their Management. Presentation to Sjogren's Support Group, Indianapolis, IN
- 2017 Sep 21 Caries and Dental Erosion: Transdisciplinary Approach. CROSP Lecture at Johnson & Johnson offices to dental health care professionals. Sao Paulo, Brazil.
- 2017 Sep 22 Caries, Dental Erosion and Sensitivity Models of Study. Lecture at Johnson & Johnson offices to their local scientists and several global scientists through WebEx. Sao Jose dos Campos, Brazil.
- 2017 Oct 02 Fluoride Mechanism of Action. Postgraduate Cariology Course ORB 580, Eastman Institute for Oral Health, University of Rochester, Rochester, NY.
- 2017 Oct 18 Management of Dental Caries throughout Life – Part I. Keynote address at the Inaugural Meeting of the American Academy of Cariology held in conjunction with the 2017 ADA Annual Meeting, Atlanta, GA.
- 2017 Oct 18 AAC Advocacy & Support Pillar. Presented at the Inaugural Meeting of the American Academy of Cariology held in conjunction with the 2017 ADA Annual Meeting, Atlanta, GA.
- 2017 Nov 17 Management of Dental Caries throughout Life. Video conference presentation to Pediatric Dentistry Residents Disease Management and Risk Assessment course UCLA School of Dentistry.
- 2018 Sep 07 Early Caries Management Using Remineralization Strategies. Presented at the FDI World Dental Federation Dental Congress 2018, Buenos Aires, Argentina.
- 2018 Sep 21 Caries Risk Assessment and Prevention. Presented at the National Dental Practice Based Research Network Northeast Region Annual Practitioners Meeting, Rochester, NY.
- 2018 Oct 01 Fluoride Mechanism of Action. Postgraduate Cariology Course ORB 580, Eastman Institute for Oral Health, University of Rochester, Rochester, NY.
- 2019 Feb 20 ICDAS Training Course. West China College of Stomatology, Sichuan University, Chengdu, China.
- 2019 Sep 05 Prevention/Management Strategies for Acid Erosion. Presented at the GSK Industry Lunch Symposium: Acid Erosion: Fact or Fiction, ADA FDI World Dental Congress, San Francisco, CA.
- 2019 Oct 21 Fluoride Mechanism of Action. Postgraduate Cariology Course ORB 580, Eastman Institute for Oral Health, University of Rochester, Rochester, NY.
- 2020 May 14 Importance of Non-invasive Caries Disease Management in the Age of COVID-19. Joseph L. Rabinowitz Memorial Lecture at Penn Dental Medicine Research Day. Online presentation using BlueJeans Events. [www.dental.upenn.edu/2020rabinowitzlecture](http://www.dental.upenn.edu/2020rabinowitzlecture)
- 2020 Oct 04 Fluoride Mechanism of Action. Postgraduate Cariology Course ORB 580, Eastman Institute for Oral Health, University of Rochester, Rochester, NY.
- 2020 Oct 10 Evidence and Research Needs. Presented Online at the Caries Management for Vulnerable Individuals: Focus on the Disabled & the Elderly Webinar. <https://aacariology.org/welcome/>  
<https://aacariology.org/wp-content/uploads/2021/01/Dom-Zero-AAC-Evidence-and-Research-Needs-s.pdf>
- 2021 Apr 10 Importance of Non-invasive Caries Disease Management in the Age of COVID-19. Online presentation to the Philippine Dental Association.
- 2021 Sep 23 Clinical Caries Research Studies - Challenges and Opportunities. Presented at The Cutting Edge of Clinical Research in Oral Health - A Symposium in Honor of Distinguished Service Professor Dr. Sebastian Ciancio, Buffalo, NY
- 2021 Oct 11 Fluoride Mechanism of Action. Postgraduate Cariology Course ORB 580, Eastman Institute for Oral Health, Online presentation.
- 2022 May 25 Evidence and Research Needs. Presented at the 6th Annual American Academy of Cariology Conference: Caries Prevention in a Modern World – Infants, Children, Adolescents & Special Health Care Needs Population, San Diego, CA.

- 2022 Jun 30 Yngve Ericsson Prize Lecture - Caries Prevention and the Pursuit of Quality. Presented at the ORCA Congress, Cagliari, Sardinia, Italy.
- 2022 Sep 16 Callahan Memorial Award Acceptance Speech. Presented at Callahan Celebration of Excellence, held in conjunction with the 156<sup>th</sup> Ohio Dental Association Annual Session, Columbus, OH.
- 2022 Oct 31 Colgate Arginine Caries Study. Presented at Indianapolis Public School FACE facilitators Professional Development meeting, Broad Ripple High School, Indianapolis, IN
- 2022 Nov 07 Fluoride and Prevention of Dental Caries Innovative. Presented in the Fundamentals of Dental Caries Course DEN 426, Eastman Institute for Oral Health, University of Rochester, Online presentation.
- 2023 Jun 06 High Caries Risk Adult Case. Presented in the Cariology Course at Temple University Kornberg School of Dentistry, Philadelphia, PA.
- 2023 Nov 20 Fluoride and Prevention of Dental Caries Innovative. Presented in the Fundamentals of Dental Caries Course DEN 426, Eastman Institute for Oral Health, University of Rochester, Online presentation.
- 2023 Dec 2 The Importance of Caries Risk Assessment to Define Individualized Treatment. Presented as part of the Caries Control - How to succeed in the clinical practice? Webinar organized by Sebastian Lara.

## **GRANTS AND FELLOWSHIPS:**

### **Federal/State/Foundation Research Grant Support**

1. Sponsor: National Research Service Award for Individual Postdoctoral Fellows.  
 Title: "Interactions between Fluoride and Acquired Pellicles."  
 P.I.: D. T. Zero  
 April 1, 1979 - July 31, 1981  
 NIDR 1 F32 DE 05193  
 Total Award: \$33,207
2. Sponsor: Easter Seal Society and Commercial Support - Alling and Cory  
 Title: Studies on the Effect of a Supervised Preventive Program for Handicapped Individuals on Oral Health.  
 P.I.: D. T. Zero  
 1980-1981  
 Easter Seal Society - \$1,000;  
 Alling and Cory - \$2,500  
 Total Award: \$3,500
3. Sponsor: Virginia Commonwealth University Grants-In-Aid  
 Title: Electrophoretic Characterization of Pellicles Formed on Enamel Pretreated with Topical Fluoride.  
 P.I.: D. T. Zero  
 December 1, 1981 - November 31, 1982  
 Total Award: \$4,965
4. Sponsor: National Institutes of Health/National Institute of Dental Research  
 Title: Glucan-Mediated Intraoral Demineralization by *S. mutans*  
 P.I.: D. T. Zero  
 January 1, 1986 - December 31, 1989.  
 NIDR 1 R23 DE07793  
 Total Award: \$107,494
5. Sponsor: National Institutes of Health/National Institute of Dental Research  
 Title: Glucan-Mediated Intraoral Demineralization by *S. mutans*  
 P.I.: D. T. Zero  
 April 1, 1987 - December 31, 1990, Supplemented Award

- NIDR 1 R29 DEO7793  
Total Award: \$334,132
6. Sponsor: National Institutes of Health/National Institute of Dental Research  
Title: Oral Retention of Topical Fluoride and Clinical Efficacy  
P.I.: D. T. Zero  
July 1, 1988 - June 30, 1991  
NIDR 1 RO1 DEO8577  
Total Award: \$452,590
  7. Sponsor: National Institutes of Health/National Institute of Dental Research  
Title: Concomitant Analysis of Carbohydrate Retention and Organic Acid Profiles of Plaque Samples by HPLC  
P.I.: D. T. Zero  
April 1989 - March 31, 1990  
Biomedical Research Support Grant RR-05548  
Total Award: \$4,000
  8. Sponsor: National Institutes of Health/National Institute of Dental Research  
Title: Effect of Growth under Different pH Conditions on the Viability of Mutans Streptococci  
P.I.: D.T. Zero  
July 1990 - December 1990  
Biomedical Research Support Grant RR-05548  
Total Award: \$2,781
  9. Sponsor: National Institutes of Health/National Institute of Dental Research  
Title: Small Instrumentation Grant  
P.I.: D. T. Zero  
Sept. 1, 1992 - August 31, 1993  
NIDR S15 DE10504-01  
Total Award: \$6,186
  10. Sponsor: National Institutes of Health/National Institute of Dental Research  
Title: Oral Retention of Topical Fluoride and Clinical Efficacy  
P.I.: D. T. Zero  
Sept. 30, 1992 - Sept. 29, 1995  
NIDR 1 RO1 DEO8577-4  
Total Award: \$654,605
  11. Sponsor: National Institutes of Health/National Institute of Dental Research  
Title: Clinical Comparison of Digital Imaging Fiber Optic Transillumination (DIFOTI) with Radiological Imaging  
P.I.: M. Elbaum (grant)  
P.I.: D.T. Zero (subcontract)  
March 1, 1997 - March 31, 1999  
NIDR 2 R44 DE11507-02A1  
Total Award: \$65,000 (EDC component)
  12. Sponsor: Human Resources and Services Administration  
Title: Innovative Rural Community Health AEGD Program  
P.I.: D. T. Zero  
July 1, 1997 - July 31, 2000  
Total Award: \$206,000
  13. Sponsor: Indiana State Department of Health  
Title: Funding Feasibility Study for a Mobile Dental Sealant Unit  
P.I.: D. T. Zero  
August 1, 2000 – June 30, 2001  
Total Award: \$26,855
  14. Sponsor: Marion County Department of Health

- Title: Population Based Study to Determine the Oral Health Status of Selected Populations  
in Marion County  
Co-PI: D. T. Zero  
May 1, 2001 – April 30, 2002  
Total Award: \$85,000
15. Sponsor: Indiana State Department of Health  
Title: State-wide Mobile Dental Sealant Program  
P.I.: D. T. Zero  
Jan 1, 2002 – June 30, 2003  
Total Award: \$273,000
16. Sponsor: National Institutes of Health/National Institute of Dental and Craniofacial Research  
Title: Development of Gold Standard Fluoride Analytical Methods  
P.I. E. A. Martinez-Mier  
Co-Invest.: D. T. Zero  
July 01, 2002 – June 30, 2004  
1 R21 DE 14716-1  
Total Award: \$303,583
17. Sponsor: American Academy for Pediatric Dentistry Foundation  
Title: Xylitol: Effects on the Acquisition of Cariogenic Species in Infants  
P.I. Fontana  
Role: Co-Investigator  
05/02/04-05/01/05  
Total Award: \$99,378
18. Sponsor: National Institutes of Health/National Institute of Dental and Craniofacial Research  
Title: Predicting Caries Risk in Underserved Toddlers  
P.I.: Margherita Fontana  
Role: Co-investigator  
September 01, 2004-June 30, 2006  
NIDCR R21 DE16451-01  
Total Award: \$378,750
19. Sponsor: National Institutes of Health/National Institute of and Craniofacial Dental Research  
Title: Clinical Validation of Combined ICDAS/QLF Exam for Early Caries Detection  
P.I.: Ferreira Zandoná  
Role: Co-investigator  
09/01/2006 – 08/31/2011  
NIH/NIDCR RO1 DE017890  
Total Award: \$3,400,000 (if fully funded over five years)
20. Sponsor: Delta Dental Fund  
Title: Risk Assessment Validation Using New Caries Detection Methods  
P.I.: Ferreira Zandoná  
Role: Co-investigator  
07/01/07 – 06/30/07  
Total Award: \$14,434
21. Sponsor: National Institutes of Health/National Institute of Dental and Craniofacial Research  
Title: Effectiveness of Sealing Caries: A Way to Reduce Disparities in Dental Caries  
P.I.: Margherita Fontana  
Role: Co-investigator  
07/01/2007 – 06/30/2009  
NIDCR 1 R21DE018115-01  
Total Award: \$416,625 (over two years)
22. Sponsor: National Center for Research Resources  
Title: Clinical and Translational Sciences Institute  
P.I.: Anantha Shekhar

- Role: Co-investigator  
 UL1RR025761-01  
 05/1/08 – 4/30/16  
 Current Direct: \$4,233,755
23. Sponsor: A70-9-069166 HRSA-Indiana State Department of Health  
 Title: Indian Strategic Oral Health Initiative  
 P.I.: Eric R. Wright  
 Role: Consultant  
 01/01/2009- 08/31/2009  
 Total Award: \$184,022
  24. Sponsor: National Institutes of Health/National Institute of and Craniofacial Dental Research  
 Title: Quantitative and Qualitative Assessment of Caries Lesion Activity  
 P.I.: M. Ando  
 Role: Co-investigator  
 7/01/2009 – 6/30/2011  
 NIH1 R21 DE018390-01A2  
 Total Award: \$423,500 (over two years)
  25. Sponsor: Borrows Foundation  
 Title: An In situ Study on the Impact of Fluoride Concentration and Salt in Milk on Its Anti-Caries Efficacy  
 P.I. F. Lippert  
 Role: Co-P.I.  
 01/01/12-6/30/14  
 Total Award: \$163,620
  26. Sponsor: DOD W81XWH-11-T-0544  
 Title: A Double-Blind, Randomized, Controlled, Dose Escalation Clinical Trial of an Antiplaque Chewing Gum - Phase 1 Safety and Tolerability and Phase 2a Safety, Tolerability, and Proof of Concept in a Gingivitis Population  
 P.I. D.T. Zero  
 09/17/12-09/16/15  
 Total Award: \$1,341,460
  27. Sponsor: OVCR Commercialization Fund  
 Title: Security Verification for HIPAA Compliance of a New Electronic Dental Caries Risk Assessment Aid  
 P.I. D.T. Zero  
 10/01/13-09/30/14  
 Total Award: \$20,000
  28. Sponsor: Univ Penn/ Institute of Dental and Craniofacial Dental Research  
 Title: Biofilm Elimination and Caries Prevention using Multifunctional Nanocatalysts  
 P.I.: H Koo  
 Role: Site PI Subcontract with University of Pennsylvania  
 12/01/17-11/30/19  
 NIDCR 1R01DE025848-01A1  
 Total Award: \$77,339 (Year 1 & 2)
  29. Sponsor: National Institutes of Health/National Institute of and Craniofacial Dental Research  
 Title: Objective Outcomes Measures for the Clinical Assessment of Erosive Tooth Wear  
 P.I.: A. Hara  
 Role: Co-investigator  
 08/01/2018 - 07/31/2020  
 5R21DE026844-02  
 Total Award: \$445,337 (Year 1 & 2)
  30. Sponsor: National Institutes of Health/National Institute of and Craniofacial Dental Research

- Title: Assessing the Oral Health and Dental Treatment Outcomes in Sjögren's Syndrome Patients  
P.I.: T. Thyvalikakath  
Role: Co-investigator  
08/09/2019 - 07/31/2021  
1R21DE027786-01A1  
Total Award: \$438,943 (Year 1 &2)
31. Sponsor: Regenstrief Institute  
Title: Saliva and COVID-19 Diagnosis and Surveillance  
P.I.: T. Thyvalikakath  
Role: Co-investigator  
10/10/2020  
Total Award: \$20,000
32. Sponsor: National Institutes of Health/National Institute of and Craniofacial Dental Research  
Title: Oral Health and Dental Treatment Outcomes of Sjogrens Syndrome Patients  
P.I.: T. Thyvalikakath  
Role: Co-investigator  
09/04/2020 - 09/03/2021  
1R56DE029195-01  
Total Award: \$549,902
33. Sponsor: Univ Penn/ Institute of Dental and Craniofacial Dental Research  
Title: Biofilm Elimination and Caries Prevention using Multifunctional Nanocatalysts  
P.I.: H Koo  
Role: Site PI Subcontract with University of Pennsylvania  
09/01/2021 - 08/31/2026  
NIDCR 2R01DE025848 - 05  
Total Subaward YR 1: \$34,173  
Total Budgeted Subaward over 5 Years: \$602,404
34. Sponsor: National Institutes of Health/National Institute of and Craniofacial Dental Research  
Title: Establishing Readiness of Dental Professionals in Practice-Based Research and Inter-Professional Care  
P.I.: T. Thyvalikakath  
Role: Co-investigator  
09/13/2023 – 06/30/2028  
1U01DE033269-01  
Total Award: \$4,699,207

### **Commercial Research Support**

1. Sponsor: Kraft, Inc.  
Title: *In vivo* Cheese Study  
P.I.: J. D. B. Featherstone  
Role: Co-investigator  
July 1, 1988 - Dec. 31, 1990  
Total Award: \$116,590
2. Sponsor: Procter and Gamble Company  
Title: Intraoral Calculus Formation and Its Prevention  
P.I.: J. D. B. Featherstone  
Role: Co-Investigator  
July 1, 1988 - Dec. 31, 1991  
Total Award: \$140,000
3. Sponsor: Beecham Products  
Title: Assessment of Retention Properties of Fluoride-Containing Capsules in the Mouth

- P.I.: D. T. Zero  
February 1 - May 31, 1989  
Total Award: \$8,500
4. Sponsor: Leaf Inc.  
Title: Effect of Chewing Xylitol Chewing Gum vs Sorbitol Chewing Gum on the Acidogenic Potential of Dental Plaque  
P.I.: D. T. Zero  
January 1, 1990 - June 30, 1990  
Total Award: \$20,430
5. Sponsor: SmithKline Beecham  
Title: Fluoride Dentifrice Dose-Response Using an Intraoral Model  
P.I.: D. T. Zero  
January 1, 1991 - June 31, 1991  
Total Award: \$12,500
6. Sponsor: Procter and Gamble Company  
Title: Evaluation of the Efficacy of Fluoride Dentifrices Using the Intraoral Enamel Demineralization Test  
P.I.: D. T. Zero  
July 1, 1991 - June 30, 1992  
Total Award: \$50,000
7. Sponsor: William Wrigley Jr. Company  
Title: Evaluation of Possible Enamel Demineralization Inhibitors Using an Intraoral Caries Model  
P.I.: D. T. Zero  
January 1, 1992 - November 31, 1992  
Total Award: \$86,262
8. Sponsor: Procter and Gamble Company  
Title: Evaluation of the Clinical Efficacy of Fluoride Dentifrices Using an Intraoral Caries Model  
P.I.: D. T. Zero  
Sept. 1, 1992 - June 30, 1993  
Total Award: \$125,000
9. Sponsor: Church and Dwight  
Title: *In situ* Testing of Fluoride Dentifrices  
P.I.: D. T. Zero  
July 1, 1993 - Feb. 28, 1994  
Total Award: \$100,000
10. Sponsor: Enamelon Research, Inc.  
Title: Evaluation of Amorphous Calcium Phosphate in a Short-term Intraoral Remin Model.  
P.I.: D. T. Zero  
June, 1994 - December 31, 1994  
Total Award: \$31,860
11. Sponsor: SmithKline Beecham  
Title: Evaluation of the Combination of Calcium Phosphate with Fluoride in an *In situ* Demineralization/Remineralization Model  
P.I.: D.T. Zero  
July 1, 1995 - June 30, 1996  
Total Award: \$135,000
12. Sponsor: Warner-Lambert Company  
Title: Evaluation of Mineral Additives Using a Short-term Intraoral Remineralization Model  
P.I.: D.T. Zero  
Sept. 1, 1995 - March 31, 1996

- Total Award: \$58,050
13. Sponsor: Enamelon Research, Inc.  
 Title: Evaluation of Amorphous Calcium Phosphate in a Short-term Intraoral Remin Model.  
 P.I.: D. T. Zero  
 April 1, 1996 - July 31, 1996  
 Total Award: \$32,362
  14. Sponsor: Church and Dwight  
 Title: Comparison of the Effect of Different Dentifrice Treatments on Fluoride Uptake by Enamel.  
 P.I.: D. T. Zero  
 Aug. 1, 1996 - Sept. 30, 1996  
 Total Award: \$23,952
  15. Sponsor: Enamelon Research, Inc.  
 Title: Evaluation of the Anticaries Efficacy of a Test Dentifrice Containing Calcium Phosphate Using an *In situ* Caries Model.  
 P.I.: D. T. Zero  
 Sept. 1, 1996 - Dec. 31, 1997  
 Total Award: \$177,407
  16. Sponsor: Church and Dwight  
 Title: Comparison of the Effect of Different Dentifrice Treatments on Fluoride Uptake by Enamel.  
 P.I.: D. T. Zero  
 Jan. 1, 1997 - Nov. 31, 1997  
 Total Award: \$128,000
  17. Sponsor: Tom's of Maine  
 Title: Evaluation of the Anticaries Efficacy of a Fluoride Dentifrice Product Using an *In situ* Caries Model  
 P.I.: D. T. Zero  
 Sept. 1, 1997 - December 31, 1998  
 Total Award: \$232,037
  18. Sponsor: Tom's of Maine  
 Title: Evaluation of Enamel Fluoride Uptake from Fluoride Dentifrice Products Using FDA Laboratory Test Profile Test Method # 40  
 P.I.: D. T. Zero  
 May 1, 1997 - Oct. 16, 1997  
 Total Award: \$62,000
  19. Sponsor: Block Drug Company  
 Title: Evaluation of Enamel Fluoride Uptake from Fluoride Dentifrice Products Using FDA Laboratory Test Profile Test Method # 40  
 P.I.: D. T. Zero  
 June 1, 1997 - Sept. 30, 1997  
 Total Award: \$27,000
  20. Sponsor: SmithKline Beecham  
 Title: Evaluation of Anticaries Efficacy of a tartar control dentifrice with fluoride using an *in situ* caries model  
 P.I.: D. T. Zero  
 October 10, 1998 – Sept. 30, 1999  
 Total Award: \$293,196
  21. Sponsor: Enamelon Research, Inc.  
 Title: Evaluation of the Anticaries Efficacy of a Test Dentifrice Containing Calcium Phosphate Using an *In situ* Caries Model - Study III  
 P.I.: D. T. Zero



- July 1, 1998 - March 31, 1999  
Total Award: \$136,656
22. Sponsor: Tom's of Maine  
Title: Evaluation of the Erosion Potential of Dentifrice Products Using an In vitro Erosion Model  
P.I.: D. T. Zero  
August 15, 1998 - February 28, 1999  
Total Award: \$18,000
23. Sponsor: SmithKline Beecham  
Title: Evaluation of Enamel Fluoride Uptake from Fluoride Dentifrice Products Using FDA Laboratory Test Profile Test Method # 40  
P.I.: D. T. Zero  
August 1, 1998 - February 28, 1999  
Total Award: \$64,000
24. Sponsor: Church and Dwight  
Title: Comparison of the Effect of Different Dentifrice Treatments on Fluoride Uptake by Enamel. Study #7  
P.I.: D. T. Zero  
Oct. 1, 1998 -Dec. 31, 1998  
Total Award: \$20,000
25. Sponsor: Fertin A/S (DANDY A/S)  
Title: Preliminary Evaluation of the Anticaries Efficacy of Chewing Gum Containing Carbamide Using an *In situ* Caries Model  
P.I.: D. T. Zero  
May 1, 1999 - December 31, 1999  
Total Award: \$29,688
26. Sponsor: W. Wrigley Jr. Company  
Title: Evaluation of the Addition of Calcium to Sugar-free Chewing Gum Using an *In situ* Remineralization Model  
P.I.: D. T. Zero  
May 1, 1999 - December 31, 1999  
Total Award: \$98,625
27. Sponsor: Warner-Lambert Company  
Title: Salivary Fluoride Clearance after Rinsing with Listerine Fluoride Mouthrinse Using Two Dosing Regimens  
P.I.: D. T. Zero  
May 1, 1999 – September 30, 1999  
Total Award: \$28,719
28. Sponsor: Proctor & Gamble  
Title: A Study to Evaluate the Gingivitis Efficacy of Various Experimental Dentifrices vs. a Negative Control  
P.I.: D. T. Zero  
Dec 1, 1999 – June 30, 2000  
Total Award: \$394,000
29. Sponsor: Proctor & Gamble  
Title: Dosing variability study  
P.I.: D. T. Zero  
March 15, 2000 – December 30, 2001  
Total Award: \$74,000
30. Sponsor: Pfizer/Warner-Lambert Company  
Title: Determination of the Efficacy of Fluoride Mouthrinse Prototype in an Intraoral Caries Test  
P.I.: D. T. Zero

- May 1, 2000 – March 31, 2001  
Total Award: \$814,000
31. Sponsor: Proctor & Gamble  
Title: A 6-month Study to Assess the Staining Potential of an Experimental Dentifrice  
P.I.: D. T. Zero  
June 12, 2000 – February 28, 2001  
Total Award: \$72,260
32. Sponsor: AK Pharma, Inc.  
Title: Evaluation of the Anticaries Potential of a New Mouthrinse Using a Human Plaque Acidity Model  
P.I.: D. T. Zero  
June 1, 2000 – August 31, 2000  
Total Award: \$27,000
33. Sponsor: Church & Dwight  
Title: A Study to Evaluate the Efficacy of Two Dentifrices to Prevent Dental Calculus Formation  
P.I.: D. T. Zero  
July 1, 2000 – December 31, 2000  
Total Award: \$73,076
34. Sponsor: Proctor & Gamble  
Title: A Study to Assess the Safety of Two Denture Adhesive Creams  
P.I.: D. T. Zero  
September 1, 2000 – June 30, 2001  
Total Award: \$85,000
35. Sponsor: Proctor & Gamble  
Title: A Study to Assess the Safety of a Viscous Liquid Polymer  
P.I.: D. T. Zero  
Dec 13, 2000 – January 31, 2001  
Total Award: \$22,000
36. Sponsor: Pfizer/Warner-Lambert Company Adams Division  
Title: A Series of Research Clinical Studies Using a Human Plaque Acidity Model to Evaluate the Cariogenicity of Food, Chewing Gum and Mint Products  
P.I.: D. T. Zero  
December 1, 2000 – February 28, 2001  
Total Award: \$83,877
37. Sponsor: Pfizer/Warner-Lambert Company Adams Division  
Title: Evaluation of the Remineralization Efficacy of Mints Using an In situ Caries Model  
P.I.: D. T. Zero  
January 1, 2001 – August 31, 2001  
Total Award: \$168,635
38. Sponsor: GlaxoSmithKline  
Title: Determination of the Ability of Various Chemical Agents to Occlude Dentinal Tubules  
P.I.: D. T. Zero  
December 1, 2001 – September 30, 2002  
Total Award: \$35,000
39. Sponsor: GlaxoSmithKline  
Title: A Clinical Study to Assess a New Dental Whitening System on Maxillary Teeth  
P.I.: D. T. Zero  
December 1, 2001 – September 30, 2002  
Total Award: \$123,289
40. Sponsor: GlaxoSmithKline  
Title: Determination of the Structure and Composition of Dental Stain

- P.I.: D. T. Zero  
December 1, 2001 – September 30, 2002  
Total Award: \$5,000
41. Sponsor: Oral-B Laboratories  
Title: A Clinical Comparison of the Safety and Efficacy of Two Electric Toothbrushes  
P.I.: D. T. Zero  
January 1, 2002 – June 30, 2002  
Total Award: \$80,377
42. Sponsor: Pfizer Consumer Products Group, Adams Division  
Title: Evaluation of the Remineralization Efficacy of Chewing Gum Using an In situ Caries model  
P.I.: D. T. Zero  
January 1, 2002 – June 30, 2002  
Total Award: \$132,915
43. Sponsor: Tom's of Maine  
Title: Evaluation of the Anticaries Efficacy of a Fluoride Dentifrice Product Using an *In situ* Caries Model  
P.I.: D. T. Zero  
April 1, 2002 - May 31, 2004  
Total Award: \$323,129
44. Sponsor: WM Wrigley Jr. Company  
Title: Plaque pH Pilot Study - Clinical Trial  
P.I.: D. T. Zero  
August 16, 2002 – May16, 2003  
Total Award: \$31,104
45. Sponsor: GlaxoSmithKline  
Title: In Situ Determination of the Ability of Various Chemical Agents Occlude Dentinal- (Pilot Study)  
P.I.: D. T. Zero  
August 01, 2002 – November 30, 2002  
Total Award: \$46,874
46. Sponsor: Pfizer/Warner-Lambert Company  
Title: Color Stability of Dental Composite Resins after Immersion in Cool Mint Listerine  
Co-P.I.: D. T. Zero  
October 1, 2002 – February 28, 2003  
Total Award: \$72,531
47. Sponsor: Pfizer/Warner-Lambert Company  
Title: Evaluation of the Anticaries Potential of an Oral Care Gel Bead Using a Human Plaque Acidity Model  
P.I.: D. T. Zero  
October 1, 2002 – February 28, 2003  
Total Award: \$39,925
48. Sponsor: WM Wrigley Jr. Company  
Title: A Study to Determine the Effect of Lozenge Use Subsequent to Snack Food Consumption on the pH of Dental Plaque  
P.I.: D. T. Zero  
August 16, 2002 - May16, 2003  
Total Award: \$94,500
49. Sponsor: GlaxoSmithKline  
Title: Determination of Chemical Composition of Stain and the Mechanisms of Stain Attachment to Dental Surfaces  
P.I.: D. T. Zero

- December 31, 2002 – December 30, 2003  
Total Award: \$80,000
50. Sponsor: Proctor & Gamble  
Title: Evaluation of the Erosive Potential of Beverages Using an In situ model  
P.I.: D. T. Zero  
January 29, 2003 – June 30, 2003  
Total Award: \$86,710
51. Sponsor: GlaxoSmithKline  
Title: Comparison of the Clinical Efficacy of Two Fluoride Dentifrices Using an In situ Caries Model  
P.I.: D. T. Zero  
May 1, 2003 – October 30, 2003  
Total Award: \$216,000
52. Sponsor: Proctor & Gamble  
Title: Evaluation of the Erosive Potential of Beverages Using an In situ model, Part II  
P.I.: D. T. Zero  
June 01, 2003 – August 01, 2003  
Total Award: \$31,605
53. Sponsor: GlaxoSmithKline  
Title: Comparison of the Clinical Efficacy of Two Fluoride Dentifrices Using an In situ Caries Model – Phase II  
P.I.: D. T. Zero  
August 1, 2003 – February 29, 2004  
Total Award: \$236,595
54. Sponsor: Cadbury Adams  
Title: A Multi-site Evaluation Using an Intraoral Remineralization Model  
P.I.: D. T. Zero  
October 15, 2003 – November 1, 2004  
Total Award: \$140,260
55. Sponsor: GlaxoSmithKline  
Title: Comparison of the Clinical Efficacy of Two Fluoride Dentifrices Using an In situ Caries Model – Phase III  
P.I.: D. T. Zero  
January 6, 2004 – June 30, 2004  
Total Award: \$293,108
56. Sponsor: GlaxoSmithKline  
Title: A Proof of Principle Study to Determine the Efficacy of a No/Low Abrasive Toothpaste vs. Control  
P.I.: D. T. Zero  
July 1, 2004 – January 1, 2005  
Total Award: \$378,890
57. Sponsor: Curozone Company  
Title: ICDAS Calibration Study  
P.I.: D. T. Zero  
September 1, 2004-January 1, 2005  
Total Award: \$100,291
58. Sponsor: Curozone Company  
Title: Epidemiology Study to Determine the Prevalence of Incipient Caries  
P.I.: D. T. Zero  
11/1/04 – 4/31/05  
Total Award: \$ 113,505
59. Sponsor: GlaxoSmithKline

- Title: Comparison of the Clinical Efficacy of Two Fluoride Dentifrices Using an In situ Caries Model – Phase IV  
P.I.: D. T. Zero  
11/22/04 – 03/31/05  
Total Award: \$385,852
60. Sponsor: GlaxoSmithKline  
Title: Pilot Study to Evaluate the Fluoride Retention in Plaque Fluid after Toothpaste Use  
P.I.: D. T. Zero  
02/01/05 – 01/31/06  
Total Award: \$69,378
61. Sponsor: W. Wrigley Jr. Company  
Title: Evaluation of New Sugar-free Chewing Gum Formulations Using an In situ Remineralization Model  
P.I.: D. T. Zero  
4/1/05 – 11/30/05  
Total Award: \$319,113
62. Sponsor: GlaxoSmithKline  
Title: Evaluation of a Dentifrice Using an Erosion Remineralization Model  
P.I.: D. T. Zero  
01/01/05 – 04/30/06  
Total Award: \$86,437
63. Sponsor: GlaxoSmithKline  
Title: Evaluation of Three Dentifrices Using an In-Situ Model of Dental Erosion and Remineralization  
P.I.: D. T. Zero  
05/01/06 – 12/31/06  
Total Award: \$203,740
64. Sponsor: GlaxoSmithKline  
Title: A Study to Compare Fluoride in Plaque Fluid after Single Use of Two Novel “Gel Foam: Dentifrices and a Marketed Dentifrice Product  
P.I.: D. T. Zero  
09/25/06 – 05/31/07  
Total Award: \$299,797
65. Sponsor: GlaxoSmithKline  
Title: Evaluation of Two Experimental Dentifrices Using an In Situ Remineralization Fluoride Uptake Model  
P.I.: D. T. Zero  
10/01/06 – 04/30/07  
Total Award: \$216,252
66. Sponsor: GlaxoSmithKline  
Title: A Study to Investigate the Effect of Fluoride on Enamel Surface Softening from an Erosive Challenge  
P.I.: D. T. Zero  
10/01/06 – 04/30/07  
Total Award: \$182,604
67. Sponsor: Curozone Company  
Title: Amendment #3 A Multi Center Study to Evaluate the Safety and Efficacy of the Use of Ozone for the Management of Fissure Caries  
P.I.: D. T. Zero  
12/20/06 – 06/30/09  
Total Award: \$541,547
68. Sponsor: Curozone Company

- Title: Amendment #4 Epidemiology Study to Determine the Prevalence of Incipient Caries  
P.I.: D. T. Zero  
12/20/06 – 10/31/07  
Total Award: \$168,450
69. Sponsor: GlaxoSmithKline  
Title: A Study to Investigate the Effect of Sodium Lauryl Phosphate on Enamel Surface Softening from an Erosive Challenge  
P.I.: D. T. Zero  
04/01/07 – 09/30/07  
Total Award: \$98,771
70. Sponsor: GlaxoSmithKline  
Title: Evaluation of In Situ Remineralization, Fluoride Uptake, and Plaque Fluid and Salivary Fluoride Retention from an Experimental Fluoride Dentifrice  
P.I.: D. T. Zero  
4/22/07 – 08/31/07  
Total Award: \$96,038
71. Sponsor: Curozone Company  
Title: Amendment #5 A Multi Center Study to Evaluate the Safety and Efficacy of the Use of Ozone for the Management of Fissure Caries – Project Management  
P.I.: D. T. Zero  
12/20/06 – 06/30/09  
Total Award: \$165,841
72. Sponsor: GlaxoSmithKline  
Title: Long-term Erosion-Abrasion In situ Model: Pilot Study  
P.I.: A. Hara  
Co-Invest: D. T. Zero  
4/22/07 – 08/31/07  
Total Award: \$158,885
73. Sponsor: GlaxoSmithKline  
Title: A Comparison of the Clinical Efficacy of Sodium Fluoride Dentifrices Using an In Situ Caries Model  
P.I.: D. T. Zero  
07/01/07 – 02/01/08  
Total Award: \$227,459
74. Sponsor: GlaxoSmithKline  
Title: Evaluation of Four Dentifrices Using and In-situ Model of Dental Erosion and Remineralization  
P.I.: D. T. Zero  
09/15/07 – 02/28/08  
Total Award: \$313,023
75. Sponsor: GlaxoSmithKline  
Title: A Study to Investigate the Effect of Sodium Lauryl Phosphate on Enamel Softening from an Erosive Challenge  
P.I.: D. T. Zero  
07/01/07 – 02/01/08  
Total Award: \$185,892
76. Sponsor: GlaxoSmithKline  
Title: Exploratory Evaluation of an Experimental Fluoride Dentifrice Formulation Using an In-situ Remineralization/Fluoride Uptake Model  
P.I.: D. T. Zero  
09/15/07 – 02/01/08  
Total Award: \$123,192

77. Sponsor: GlaxoSmithKline  
Title: Comparison of the Clinical Efficacy from the Retention Phase of Fluoride Delivery of Fluoride Toothpastes Using an In-Situ Caries Model  
P.I.: D. T. Zero  
10/01/07 – 03/31/08  
Total Award: \$296,095
78. Sponsor: GlaxoSmithKline  
Title: The Effect of Brushing Time and the Amount of Dentifrice Used on Enamel Surface Microhardness.  
P.I.: D. T. Zero  
12/17/07 – 06/30/08  
Total Award: \$330,913
79. Sponsor: GlaxoSmithKline  
Title: An Exploratory Study to Compare the Clinical Efficacy of Fluoride Dentifrices Using an In Situ Caries Model.  
P.I.: D. T. Zero  
02/01/08 – 08/31/08  
Total Award: \$144,969
80. Sponsor: GlaxoSmithKline  
Title: Evaluation of a Test Mouthwash and Dentifrice Regimen in an In-Situ Model of Dental Erosion and Remineralization.  
P.I.: D. T. Zero  
03/14/08 – 09/30/08  
Total Award: \$312,183
81. Sponsor: GlaxoSmithKline  
Title: Clinical Efficacy of Fluoride Toothpastes Using an In-Situ Caries Model.  
P.I.: D. T. Zero  
03/14/08 – 10/30/08  
Total Award: \$322,651
82. Sponsor: GlaxoSmithKline  
Title: A Study to Investigate the Effect of Zinc Oxide on Enamel Surface Softening from an Erosive Challenge.  
P.I.: D. T. Zero  
03/14/08 – 11/30/08  
Total Award: \$156,180
83. Sponsor: GlaxoSmithKline  
Title: Evaluation of Plaque Fluid Fluoride Retention from Fluoride Toothpastes  
P.I.: D. T. Zero  
06/01/08 – 10/27/08  
Total Award: \$326,502
84. Sponsor: GlaxoSmithKline  
Title: A Study to Evaluate the Effectiveness of Three Fluoridated Dentifrices Using an In-situ Model of Dental erosion and Remineralization  
P.I.: D. T. Zero  
06/20/08 – 12/31/08  
Total Award: \$316,963
85. Sponsor: GlaxoSmithKline  
Title: A Proof of Technology Study to Investigate the Effect of a Calcium Phosphate Complex on Enamel Surface Softening from an Erosive Challenge  
P.I.: D. T. Zero  
08/01/08 – 2/28/09  
Total Award: \$184,101

86. Sponsor: GlaxoSmithKline  
Title: Clinical Efficacy of Fluoride Toothpastes Using an In situ Model  
P.I.: D. T. Zero  
09/02/08 – 6/30/09  
Total Award: \$30,199
87. Sponsor: GlaxoSmithKline  
Title: Clinical Efficacy of Fluoride Toothpastes Using an In situ Model  
P.I.: D. T. Zero  
09/02/08 – 6/30/09  
Total Award: \$304,186
88. Sponsor: GlaxoSmithKline  
Title: A Study to Measure the Effect of Dentifrice Usage Regime on Delivery and Efficacy of Fluoride Using an In situ Caries Model  
P.I.: D. T. Zero  
12/17/2008 – 08/31/2009  
Total Award: \$358,093
89. Sponsor: GlaxoSmithKline  
Title: A Placebo Controlled Study to Evaluate the Effectiveness of Three Experimental Treatments Using an In-situ Model of Dental Erosion and Remineralization  
P.I.: D. T. Zero  
02/20/2009 – 10/31/2009  
Total Award: \$317,148
90. Sponsor: GlaxoSmithKline  
Title: A Study to Compare the Enamel Remineralization Potential of Experimental Toothpastes Using an In situ Caries Model  
P.I.: D. T. Zero  
06/01/2009 – 12/31/2009  
Total Award: \$210,461
91. Sponsor: W. Wrigley Jr. Company  
Title: Evaluation of New Sugar-free Chewing Gum Formulations Using an In situ Remineralization Model – Uncontrolled Acidogenic Challenge  
P.I.: D. T. Zero  
5/26/09 – 05/25/10  
Total Award: \$268,571
92. Sponsor: W. Wrigley Jr. Company  
Title: Evaluation of New Sugar-free Chewing Gum Formulations Using an In situ Remineralization Model –Controlled Acidogenic Challenge  
P.I.: D. T. Zero  
5/26/09 – 05/25/10  
Total Award: \$272,991
93. Sponsor: GlaxoSmithKline (Z3480664/09-i-59)  
Title: Evaluation of a Test Mouthwash and Dentifrice Regimen in an In-Situ Model of Dental Erosion  
P.I.: D. T. Zero  
08/01/2009 – 01/31/2010  
Total Award: \$199,712
94. Sponsor: GlaxoSmithKline (T3350067/OHRI 09-i-60)  
Title: A Study to Measure the Effect of Usage Regimen on Delivery and Clearance of Fluoride from a Sodium Fluoride Dentifrice  
P.I.: D. T. Zero  
08/01/2009 – 01/31/2010  
Total Award: \$180,987



95. Sponsor: GlaxoSmithKline (T3500690/OHRI 09-i-61)  
Title: Comparison of Enamel Remineralization Potential of Dentifrices Incorporating Different Fluoride Salts Using an In Situ Model  
P.I.: D. T. Zero  
10/15/2009 – 05/31/2010  
Total Award: \$390,574
96. Sponsor: Johnson & Johnson  
Title: In situ Anticaries Evaluation of Experimental Dentifrices  
P.I.: D. T. Zero  
12/02/09 – 02/28/10  
Total Award: \$104,685
97. Sponsor: GlaxoSmithKline (OHRI 10-i-064)  
Title: A pilot study to Assess the In situ Remineralization of Low- and High-r Caries Lesions  
P.I.: D. T. Zero  
03/01/2010 – 10/31/2010  
Total Award: \$30,000
98. Sponsor: GlaxoSmithKline (Z3690974/OHRI 10-I-068)  
Title: Exploratory Proof of Principle Study to Evaluate the Remineralization Efficacy Fluoride Dentifrice Containing Calcium Phosphosilicate Using an In situ Remineralization Model  
P.I.: D. T. Zero  
07/01/10 – 06/30/11  
Total Award: \$494,089
99. Sponsor: GlaxoSmithKline (T3450972/IU 10-I-069)  
Title: Clinical Efficacy of Fluoride Toothpastes Using an In situ Caries Model  
P.I.: D. T. Zero  
07/1/10 – 06/30/11  
Total Award: \$256,827
100. Sponsor: GlaxoSmithKline (Z3170978/10-i-067)  
Title: Exploratory Study to Evaluate the Remineralization Effectiveness of Modified Dentifrices in an In situ Erosion Model  
P.I.: D. T. Zero  
07/01/2010 – 11/30/2010  
Total Award: \$47,184
101. Sponsor: GlaxoSmithKline (Z6961036/10-i-070)  
Title: A Placebo Controlled Study to Evaluate the Effectiveness of Experimental Foaming Toothpastes Using an In situ Erosion Remineralization Model  
P.I.: A.T. Hara  
Co-PI: D.T. Zero  
09/01/10-03/23/11  
Total Award: \$239,017
102. Sponsor: GlaxoSmithKline (Z6381243/11-I-72)  
Title: An Exploratory Study Evaluating the Effects of Toothpastes on Tooth Enamel Surface Loss in a Long Term Erosion/Abrasion In situ Model  
P.I.: A.T. Hara  
Role: Co-PI  
02/01/11-10/31/11  
Total Award: \$158,961
103. Sponsor: GlaxoSmithKline (T7331311)  
Title: Project to Increase the Partial Denture Wearer Panel/Database  
P.I.: D.T. Zero  
04/01/11-10/31/11  
Total Award: \$29,440

103. Sponsor: GlaxoSmithKline (11-d-203)  
Title: Pilot Study on the Feasibility of Saliva and Plaque Collection in Young Children Ages 4 to 5  
P.I.: D.T. Zero  
06/25/11-09/30/11  
Total Award: \$89,157
104. Sponsor: GlaxoSmithKline (11-i-074)  
Title: Pilot Study on the Feasibility of Using a Palatal Caries Remineralization Model in Children  
P.I.: D.T. Zero  
06/14/11-10/31/11  
Total Award: \$116,328
105. Sponsor: GlaxoSmithKline (T7331311/IU 11-i-073)  
Title: Exploratory Study to Evaluate the Remineralization Potential of a Non-Aqueous Dentifrice in an In situ Caries Model  
P.I.: D.T. Zero  
06/20/11-04/30/12  
Total Award: \$588,240
106. Sponsor: Johnson & Johnson  
Title: In situ Anticaries Evaluation of Sodium Fluoride Mouthrinses  
P.I.: D. T. Zero  
09/14/11-03/30/12  
Total Award: \$158,528
107. Sponsor: GlaxoSmithKline (Z6961385/11-I-076)  
Title: A Placebo Controlled Study to Evaluate the Effectiveness of Two Gel to Foam Toothpastes Using a Modified In situ Model of Dental Erosion and Remineralization  
P.I.: A.T. Hara  
Role: Co-PI  
11/09/11-05/31/12  
Total Award: \$310,253
108. Sponsor: GlaxoSmithKline (RH01381/11- i -078)  
Title: A Clinical Study to Evaluate the Effect of Brushing Duration on Fluoride Levels in Plaque Fluid and Saliva in Children  
P.I.: E.A. Martinez-Mier  
Role: Co-Investigator  
10/01/11-03/31/12  
Total Award: \$246,647
109. Sponsor: GlaxoSmithKline (RH01381)  
Title: Project to Increase the Partial Denture Wearer Panel/Database for Study  
P.I.: D.T. Zero  
11/08/11-03/31/12  
Total Award: \$93,970
110. Sponsor: GlaxoSmithKline (RH01404/ IU 11-i-079)  
Title: Exploratory Study to Evaluate the Remineralization Potential of two Experimental Dentifrices in an In situ Caries Model GSK Study  
P.I.: D.T. Zero  
11/04/11-08/31/12  
Total Award: \$509,220
111. Sponsor: GlaxoSmithKline (RH01390/11-i-081)  
Title: A Clinical Study to Evaluate Experimental Children's Toothpastes in In situ Caries Model  
P.I.: D.T. Zero  
12/01/11-07/31/12

- Total Award: \$367,945
112. Sponsor: GlaxoSmithKline (RH01299/12/i/082)  
 Title: The Effect of Fluoride in an Experimental Dentifrice on Remineralization of Erosive Lesions In-situ  
 P.I.: D.T. Zero  
 12/15/11-07/31/12  
 Total Award: \$377,611
113. Sponsor: GlaxoSmithKline (RH01381/11- i -078)  
 Title: In situ Study to Confirm the Anti-caries Potential of a 1.1365% Sodium Monofluorophosphate (1500ppmF) Dentifrice Containing 5% w/w NovaMin  
 P.I.: D.T. Zero  
 12/20/11-12/31/12  
 Total Award: \$681,746
114. Sponsor: GlaxoSmithKline (RH01495/11-i-085)  
 Title: A Clinical Study to Evaluate an Experimental Children's Toothpaste in an In situ Caries Model  
 P.I.: D.T. Zero  
 03/30/12-3/31/13  
 Total Award: \$362,773
115. Sponsor: GlaxoSmithKline  
 Title: Caries Management Course Multimedia E-Learning Program (Smile-On)  
 P.I.: D.T. Zero  
 07/1/12-6/30/13  
 Total Award: \$60,000
116. Sponsor: GlaxoSmithKline (RH01648/IU-12-I-088)  
 Title: A Proof of Technology In-situ Study to Investigate the Impact of Fluoride Dentifrices with Different Surfactant Systems on Enamel Surface Softening following Erosive Changes  
 P.I.: A. Hara  
 Role: Co-Investigator  
 01/29/12-06/30/13  
 Total Award: \$252,730
117. Sponsor: Unilever  
 Title: The Effect of Calcium-enriched Toothpaste, Standard Fluoride Toothpaste and Fluoride Free Toothpaste on Demineralized Tooth Enamel In situ  
 P.I.: D.T. Zero  
 11/20/12-05/30/13  
 Total Award: \$229,230
118. Sponsor: GlaxoSmithKline  
 Title: Performance of ICDAS, QLF, and Canary System to Detect Primary Caries in Permanent Teeth  
 P.I.: D.T. Zero  
 12/01/12-10/01/13  
 Total Award: \$90,000
119. Sponsor: GlaxoSmithKline (RH01648/IU-12-I-088)  
 Title: Erosion Leadership: In vitro Pre-Clinical Studies (12-EA-16; 12-EA-12; 12-EA-07)  
 P.I.: A. Hara  
 Role: Co-Investigator  
 09/20/13-03/01/14  
 Total Award: \$106,111
120. Sponsor: GlaxoSmithKline (RH01648/IU-12-I-088)

- Title: Evaluation of a Mouthrinse and Dentifrice Regimen in an In situ Remineralization Dental Erosion Short Term Model  
P.I.: A. Hara  
Role: Co-Investigator  
08/09/13-02/09/14  
Total Award: \$203,562
121. Sponsor: Unilever (ORL-IST-1425/IU-13-i-093)  
Title: The Effect of a Dual-Phase Calcium Silicate/Phosphate Plus Fluoride Gel Used in Combination with Calcium-Silicate/Phosphate Plus Fluoride Toothpaste on Demineralization Tooth Enamel Compared to Calcium Silicate/Phosphate Plus Fluoride Toothpaste, Standard Fluoride Toothpaste and Non-Fluoride Toothpaste In situ  
P.I. D.T. Zero  
10/01/13-09/30/14  
Total Award: \$360,199
122. Sponsor: GlaxoSmithKline (RH02437/14-i-094)  
Title: The Effect of Experimental Dentifrices on Remineralization of Caries Lesions In-situ  
P.I.: D.T. Zero  
05/21/14- 1/21/15  
Total Award: \$514,826
123. Sponsor: Johnson & Johnson (CO-140711120407-NACT/IU 14-i-098)  
Title: Screening and Recruitment of Panelists Who Wear Mandibular Partial Dentures for Participation in Subsequent Study(ies) Which Will Use an In-Situ Bioflim Model  
P.I.: D. T. Zero  
07/21/2014-01/30/2015  
Total Award: \$83,666 + \$28,343 (supplement) = \$112,009
124. Sponsor: Unilever (ORL-IST-1425/IU-13-i-093)  
Title: The Effect of a Dual-Phase Calcium Silicate/Phosphate Plus Fluoride Gel Used in Combination with Calcium-Silicate/Phosphate Plus Fluoride Toothpaste on Erosively Challenged Tooth Enamel In situ.  
P.I. D.T. Zero  
10/01/2014-01/31/2015  
Total Award: \$111,386
125. Sponsor: Johnson & Johnson (CO-14718090150-OCCT/14-i-097)  
Title: Model Feasibility to Determine Optimal Time to Biofilm Growth  
P.I.: D. T. Zero  
10/13/14-03/31/15  
Total Award: \$74,279
126. Sponsor: GlaxoSmithKline (RH02534/14/i/100)  
Title: An Exploratory Study to Assess the Ability of a Modified In situ Model to Evaluate the Anti-Erosion Properties of Fluoride Dentifrices  
P.I.: A. Hara  
Role: Co-Investigator  
10/01/14-02/28/15  
Total Award: \$214,146 + \$5,463 (Amendment) = \$219,609
127. Sponsor: GlaxoSmithKline (203160)  
Title: Clinical Evaluation of Oral Hygiene Products in an In Situ Caries Model  
P.I.: D.T. Zero  
04/01/2015 - 10/31/2015  
Total Award: \$462,451
128. Sponsor: Johnson & Johnson (CO-150115163108-NACT 15-i-104)  
Title: Assessment of Fluid Dynamic Parameters for Disruption of In-situ Biofilms with and without Chemistry Treatments  
P.I.: D. T. Zero

- 04/01/2015-10/31/2015  
Total Award: \$127,229
129. Sponsor: C3-Jian, Inc. (C3J15-202-00/15-d-228)  
Title: A Phase 2, Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety and Microbiology of C16G2 Administered in Multiple Oral Gel Doses to Adolescent and Adult Dental Subjects  
P.I.: D. T. Zero  
07/15/15-06/30/16  
Total Award: \$176,143
130. Sponsor: Johnson & Johnson (CO-150803080504-OCCT/ IU 15-i-106)  
Title: An Ex-vivo Assessment of Plaque Biofilm Removal Using a Novel, Multi-Nozzle Fluid Delivery System with and without the Use of an Experimental Formulation  
P.I.: D. T. Zero  
09/30/2015-12/31/2015  
Total Award: \$129,314
131. Sponsor: C3-Jian, Inc. (C3J15-203-00/15-d-230)  
Title: A Phase 2, Double-blind, Placebo-controlled and Open-Label; Multi-Center Study to Evaluate the Microbiology and Safety of C16G2 Administered in Multiple Oral Gel Doses to Adult and Adolescent Dental Subjects  
P.I.: D. T. Zero  
11/03/15-11/03/16  
Total Award: \$105,351
132. Sponsor: Johnson & Johnson (CO-150921151037-OCCT/ IU 15-d-229)  
Title: An Exploratory Clinical and Sensory Evaluation of the Effect of an Early Prototype Fluid Jetting Dental Cleaning System  
P.I.: D. T. Zero  
10/27/2015-01/31/2016  
Total Award: \$126,327
133. Sponsor: GlaxoSmithKline (RH02538/ IU 15-I-105)  
Title: Clinical Efficacy of Three Experimental Toothpastes Using an In situ Caries Model  
P.I.: D.T. Zero  
12/01/2015 - 01/31/2017  
Total Award: \$714,068
134. Sponsor: Noveome Biotherapeutics (ST266-PERIO-201)  
Title: A Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety, Efficacy, and Treatment Regimen of ST266 in Subjects with Moderate to Severe Periodontitis.  
P.I.: D.T. Zero  
05/05/2016 – 09/30/17  
Total Award: \$133,530
135. Sponsor: Johnson & Johnson (CO-160504130216-OCCT/ IU 16-i-109)  
Title: In situ Remineralization/Demineralization Evaluation of an Experimental Mouth Rinse  
P.I.: D. T. Zero  
07/01/2016-12/31/2016  
Total Award: \$300,468
136. Sponsor: Johnson & Johnson (CO-160628094301-OCCT/IU 16-D-111)  
Title: A Study of the Prevention of Demineralization Potential of an Experimental Mouth Rinse in an In situ Biofilm Model  
P.I.: D. T. Zero  
08/01/2016-01/31/2017  
Total Award: \$233,085
137. Sponsor: Novartis Pharmaceuticals Corporation (VAY736A2201/IU 17-d-235)

- Title: A Randomized, Double-Blind, Placebo-Controlled Multicenter Phase 2 Dose-Ranging Study to Assess The Safety and Efficacy of Multiple VAY736 Doses Administered Subcutaneously in Patients with Moderate to Severe Primary Sjögren's Syndrome  
P.I.: D.T. Zero  
06/15/2017 - 09/30/2020  
Total Award: \$344,979
138. Sponsor: Johnson & Johnson (CO-1407011120407-NACT)  
Title: Magellan 1: Screening and Recruitment of Panelists Who Wear Mandibular Partial Dentures for Participation in Subsequent Study(ies) Which Will Use an In-situ Biofilm Model  
P.I.: D. T. Zero  
08/09/2017-12/31/2017  
Total Award: \$117,951
139. Sponsor: GlaxoSmithKline (GSK 00498431 / IU071041-00002B)  
Title: Evaluation of the Fluoride Dose Response of a Modified In situ Caries Model  
P.I.: D.T. Zero  
11/03/2017 -11/02/2018  
Total Award: \$332,038
140. Sponsor: GlaxoSmithKline (GSK 208166/ IU 17-i-113)  
Title: A Randomized, Examiner Blind, Crossover, In situ Erosion Study to Investigate the Effectiveness of an Experimental Dentifrice in Remineralization of Previously Softened Enamel Compared to a Fluoride Free Placebo  
P.I.: A. Hara  
Role: Co-Investigator  
10/01/2017 - 06/30/2018  
Total Award: \$324,520
141. Sponsor: Johnson & Johnson (CO-170602085906-OCCT/) /IU 17-i-114)  
Title: Hanami, a Study of the Enhanced Remineralization Potential of Experimental Lozenge Formulations in an In situ Biofilm Model  
P.I.: D. T. Zero  
09/25/2017 - 05/31/2018  
Total Award: \$399,411
142. Sponsor: Church and Dwight, INC (ST-7702/IU 18-D-328)  
Title: Evaluation of the Dose Response of Baking Soda in Fluoride Dentifrice in Neutralizing the Plaque pH Response Associated with a Sucrose Challenge  
P.I.: D.T. Zero  
01/30/2018 - 01/30/2019  
Total Award: \$70,940
143. Sponsor: Univ of Pennsylvania/Johnson & Johnson (071577-00002B)  
Title: A Novel Anti-Plaque Approach Using Catalytic Nanoparticles  
P.I. Koo  
Role: Site PI  
01/01/2018 - 03/31/2019  
Total Award: \$148,000
144. Sponsor: Johnson & Johnson (CCSORC000689/IU 18-i-116)  
Title: A Study of the Effects of Experimental Rinse Formulation Ex Vivo in an In-situ Biofilm Model  
P.I.: D. T. Zero  
09/05/2018 - 03/31/2019  
Total Award: \$375,328
145. Sponsor: Hello Products LLC  
Title: Evaluation of the Anticaries Efficacy of a Fluoride Dentifrice Product Using an In situ Remineralization Model

- P.I. PI  
09/28/2018 - 09/28/2020  
Total Award: \$284,372
146. Sponsor: Johnson & Johnson (19-D-240/CCSORC000802)  
Title: Pilot Study: The Effects on Plaque pH and Saliva of Experimental Chewable Tablets  
P.I.: D. T. Zero  
01/14/2019 - 05/31/2019  
Total Award: \$193,932
147. Sponsor: Unilever (ORL-IST-3324/19-I-053)  
Title: The Effect of a Dual-Phase Calcium Silicate/Phosphate Plus Fluoride Gel Used In Combination with Calcium-Silicate/Phosphate Plus Fluoride Toothpaste on Demineralized Tooth Enamel Compared to Calcium Silicate/Phosphate Plus Fluoride Toothpaste, Standard Fluoride Toothpaste and Non-Fluoride Toothpaste In situ.  
P.I. D.T. Zero  
08/23/2019-12/23/2020  
Total Award: \$356,614 (with 2 supplements)
148. Sponsor: Johnson & Johnson (Armor CCSORC001935/19-i-119)  
Title: Effects of Potassium Oxalate Mouthrinses on Dental Erosion  
P.I.: A. Hara  
Role: Co-Investigator  
09/11/2019-08/31/2020  
Total Award: \$420,253
149. Sponsor: Novartis Pharmaceuticals Corporation (CFZ533B2201/19-D-241)  
Title: A 48-week, 6-arm, randomized, double-blind, placebo controlled multicenter trial to assess the safety and efficacy of multiple CFZ533 doses administered subcutaneously in two distinct populations of patients with Sjögren's Syndrome (TWINSS)  
P.I.: D.T. Zero  
06/01/2019 - 06/30/2023  
Total Award: \$322,330
150. Sponsor: Colgate-Palmolive (CRO-2020-CAR-ARG-ED/IU 20-D-243)  
Title: A Phase 2 randomized, double-blind, active-controlled multi-center clinical trial to assess the safety and the anti-caries efficacy of COL101 (arginine) non-fluoride dentifrices with 1.5%, 4.0% and 8.0% arginine in comparison with 0.24% sodium fluoride (1100 ppm F) dentifrice control in 10 to 14-year-old children.  
P.I.: D.T. Zero  
03/24/2020 - 03/23/2025  
Total Award: \$427,950
151. Sponsor: Procter and Gamble Company (2020154 / 20-1-120)  
Title: Evaluation of the Fluoride Dose Response of MPF Dentifrice Using In situ Caries Model.  
P.I.: D.T. Zero  
01/28/2021 - 01/27/2026  
Total Award: \$330,545
152. Sponsor: Funded by Amgen through Investigator Sponsored Studies (ISS) Program (CAMG334AUS01T)  
Title: A Randomized, Double Blind, Placebo-Controlled Single Center Phase 2 Study to Assess the Safety and Efficacy of Off-label Subcutaneous Administration of Erenumab-aooe in Patients with Temporomandibular Disorder.  
P.I.: D.T. Zero  
04/22/2021 - 04/21/2026  
Total Award: \$181,798
153. Sponsor: Novartis Pharmaceuticals Corporation (CFZ533B2201E1)  
Title: A TWINSS extension trial to evaluate the safety and tolerability of CFZ533 (iscalimab) at two dose levels administered subcutaneously in patients with Sjögren's Syndrome

- P.I.: D.T. Zero  
08/01/2021 - 05/31/2025  
Total Award: \$138,447 – Budget reduced to \$4,068 due to subject's decision not to continue
154. Sponsor: BIOHAVEN PHARMACEUTICALS, INC (BHV3000-317-004)  
Title: Double-Blind, Randomized, Placebo Controlled, Safety and Efficacy Trial of BHV-3000 (rimegepant) Orally Disintegrating Tablet (ODT) for the Acute Treatment of Temporomandibular Disorders (TMD)  
P.I.: D.T. Zero  
05/03/2022 - 05/02/2027  
Total Award: \$215,091
155. Sponsor: Novartis Pharmaceuticals Corporation (CVAY736A2301)  
Title: A randomized, double-blind, placebo controlled, 2-arm multicenter phase 3 study to assess the efficacy and safety of ionalumab in patients with active Sjögren's syndrome (NEPTUNUS-1)  
P.I.: D.T. Zero  
04/01/2022 - 10/29/2028  
Total Award: \$369,369
156. Sponsor: HALEON (14588/23-I-121)  
Title: Comparison of the Remineralization Potential of an Optimized Fluoride Dentifrice with a Control Fluoride Dentifrice Using an in Situ Caries Model (Haleon #14588)  
P.I.: D.T. Zero  
07/10/2023 – 06/30/2026  
Total Award: \$522,926

## **PUBLICATIONS:**

### **Book Chapters and Proceedings**

1. Bibby BG, Huang CT, Brown JP, **Zero DT**, and Curzon MEJ. pH measurements of in vitro dental plaque. Foods, Nutrition and Dental Health, Proceeding of the Foods, Nutrition and Dental Health Conference, Vol. III, J. Hefferren and H. Koehler, eds. Chicago, Pathotox Publishers, 1981, pp. 93-104.
2. Curzon MEJ, **Zero DT**, Treasure PE, Eisenberg AD, Featherstone JDB. Evaluation of a sterilizable artificial mouth to study plaque pH and enamel demineralization. Foods, Nutrition and Dental Health Conference, Vol. IV, J. Hefferren, W. Ayer, H. Koehler, C. McEmery, eds. Chicago, American Dental Association Publishers, 1984, pp. 7-14.
3. Featherstone JDB, **Zero DT**. Laboratory and human studies to elucidate the mechanism of action of fluoride-containing dentifrices. In: Clinical and Biological Aspects of Dentifrices, Emberg, G. and Rolla G., eds. Oxford University Press, 1992, pp 41-50.
4. **Zero DT**. Adaptations in dental plaque. In: "Cariology for the Nineties". Bowen W.H. and Tabak, L., eds. University of Rochester Press, Rochester, 1993, pp. 333-350.
5. Berkowitz RJ, **Zero D**, Edelstein B. Contributor: "Dental Caries" (chapter) in Twenty Common Problems in Preventive Health Care. Ed. D. Campos-Outcalt, McGraw-Hill, 2000, pp. 65-78.
6. **Zero DT**, Lussi A. Etiology of enamel erosion - intrinsic and extrinsic factors. (chapter) in Tooth Wear and Sensitivity. Ed. M. Addy, G. Embery, M. Edgar, R. Orchardson, Martin Dunitz, Ltd, 2000, pp. 121-139.
7. **Zero D**, Mol A, Sá Roriz C, Spoon M, Jacobs A, Keem S, Elbaum M. Caries detection using digital imaging fiber-optic transillumination (DIFOTI™) - A Preliminary Evaluation. In Early Detection of Dental Caries II. Ed. G Stookey, Indianapolis, Indiana University School of Dentistry, 2000, pp. 169-183.
8. **Zero DT**, González-Cabezas C, Fontana M. Oral factors to consider that influence restorative treatment. In The Changing Practice of Restorative Dentistry. Ed. S Duke, Indianapolis, Indiana University School of Dentistry, 2002, pp. 87-103.



9. Eggertsson H, Ferreira-Zandoná AG, Ando M, González-Cabezas C, Fontana M, Martínez-Mier EA, Waskow-Chin JR, Jackson RD, Eckert GJ, Stookey GK, **Zero DT**: Reproducibility of in vitro and clinical examinations with QLF (Quantitative Light-induced Fluorescence). Developing guidelines for imaging and analyzing QLF- images, and a process for training examiners. In: Stookey GK, ed. Early detection of dental caries III: proceedings of the 6th annual Indiana Conference. Indianapolis, Indiana: Indiana University School of Dentistry 2003:213-228.
10. Ismail AI, Banting D, Eggertsson H, Ekstrand KR, Ferreira-Zandoná A, Longbottom C, Pitts NB, Reich E, Ricketts D, Selwitz R, Sohn W, Topping GV, **Zero D**. Rationale and evidence for the International Caries Detection and Assessment System (ICDAS II). In: Clinical Models Workshop: Remin-Demin, Precavitation, Caries. Proceedings of the 7<sup>th</sup> Indiana Conference, Stookey GK, editor, Indianapolis, Indiana University School of Dentistry, 2005, pp. 161-221.
11. **Zero DT**, Moynihan P, Lingström P, Birkhed D. The role of dietary control. In Dental Caries: The Disease and its Clinical Management. Eds. Fejerskov O and Kidd E, Blackwell Munksgaard, 2008, pp. 329-352.
12. Ekstrand K, **Zero DT**. Die Ökologie der mundhöhle. In Karies: Wissenschaft und Klinische Praxis. Eds. Meyer-Lückel H, Paris S, and Ekstrand K, Georg Thieme Verlag, 2012, pp. 3-21. (German)
13. Ekstrand K, **Zero DT**. Ecology of the oral cavity. In Caries Management – Science and Clinical Practice. Eds. Meyer-Lückel H, Paris S, and Ekstrand K, Thieme, 2013, pp. 3-20.
14. Hara AT, **Zero DT**. Erosion Effects on Teeth. Clinical Strategies for the Prevention of Erosive Tooth Wear. In Foundations in Dentistry. Ed. Drone J, Indiana Dental Association, 2013, pp. 61-76.
15. Phantumvanit P, **Zero D**. Dental Caries. In Periodontal Disease, Dental Caries and Hypersensitivity: An Update for NEW GEN. Ed. Samaranayake LP, Singapore, MIMS Pte Ltd, 2013, pp. 26-37.
16. Jackson R, **Zero D**. Current Evidence for Caries Preventive Strategies. In Evidence-Based Dentistry for the Dental Hygienist. Ed. Fransve-Hawley, J, Quintessence Publishing Co, Inc, 2014, pp.197-221.
17. Scaramucci T, Carvalho JC, Hara AT, **Zero DT**. Causes of Dental Erosion: Intrinsic Factors. In Dental Erosion and Its Clinical Management. Ed. Amaechi BT, Springer International Publishing AG, Switzerland, 2015, pp. 35-68.
18. Hara AT, Carvalho JC, **Zero DT**. Causes of Dental Erosion: Extrinsic Factors. In Dental Erosion and Its Clinical Management. Ed. Amaechi BT, Springer International Publishing AG, Switzerland, 2015, pp. 69-98.
19. Moss ME, Zero DT. Fluoride and Caries Prevention. In Burt and Eklund's Dentistry, Dental Practice, and the Community 7<sup>th</sup> Edition. Eds. AK Mascarenhas, C Okunseri and BA Dye, Saunders pub. 2020, pp. 277-295.

#### **Peer-Reviewed Articles (Pub Med)**

<https://www.ncbi.nlm.nih.gov/myncbi/domenick.zero.2/bibliography/public/>

1. Bibby BG, Huang CT, **Zero D**, Mundorff SA, Little MF. Protective effect of milk against in vitro caries. J Dent Res 1980;59:1565-1570. PubMed [journal] PMID: 6932412
2. **Zero DT**, Curzon MEJ, Zander HA. Physical and chemical effects of toothpastes on dental enamel. J Dent Res 1982;61:451-455. PubMed [journal] PMID: 6801100
3. **Zero DT**, Van Houte J, Russo J. Enamel demineralization by acid produced from endogenous substrate in oral streptococci. Arch Oral Biol 1986;31:229-234. PubMed [journal] PMID: 3459413
4. Bibby BG, Mundorff SA, **Zero DT**, Almekinder KJ. Oral food clearance and the pH of plaque and saliva. J Am Dent Assoc 1986;112:333-337. PubMed [journal] PMID: 3457071
5. **Zero DT**, Van Houte J, Russo J. The intraoral effect on enamel demineralization of extracellular matrix material synthesized from sucrose by *Streptococcus mutans*. J Dent Res 1986;65:918-923. PubMed [journal] PMID:3458743
6. **Zero DT**, Fu J, Espeland MA, Featherstone JDB. Comparison of fluoride concentrations in unstimulated whole saliva following the use of a fluoride dentifrice and a fluoride rinse. J Dent Res 1988;67:1257-1262. PubMed [journal] PMID: 3170879

7. **Zero DT**, Rahbek I, Fu J, Proskin HM, Featherstone JDB. Comparison of the iodide permeability test, the surface microhardness test and mineral dissolution of bovine enamel following acid challenge. *Caries Res* 1990;24:181-188. PubMed [journal] PMID: 2364403
8. Meyerowitz C, Featherstone JDB, Billings RJ, Eisenberg AD, Fu J, Shariati M, **Zero DT**. Evaluation of 0.05 percent sodium fluoride mouth rinse in radiation-induced hyposalivation using an intra-oral model. *J Dent Res* 1991;70:894-898. PubMed [journal] PMID: 2022771
9. **Zero DT**, Fu J, Anne KM, Cassata S, McCormack SM, Gwinner LM. An improved intraoral enamel demineralization test model for the study of dental caries. *J Dent Res* 1992;71 (Spec Iss):871-878. PubMed [journal] PMID: 1592978
10. Featherstone JDB, **Zero DT**. An in situ model for simultaneous assessment of inhibition of demineralization and enhancement of remineralization. *J Dent Res* 1992;71 (Spec Iss):804-810. PubMed [journal] PMID: 1592963
11. **Zero DT**, Raubertas RF, Pedersen AM, Fu J, Hayes A, Featherstone JDB. Studies of fluoride retention by the oral soft tissues after application of home-use topical fluorides. *J Dent Res*. 1992;71:1546-1552. PubMed [journal] PMID: 1522285
12. **Zero DT**, Raubertas RF, Fu J, Pedersen AM, Hayes AL, Featherstone JDB. Fluoride concentrations in plaque, whole saliva and ductal saliva after application of home-use topical fluorides. [published eerratum appears in *J Dent Res* 1993 Jan;72(1):87]. *Dent Res* 1992;71:1768-1775. PubMed [journal] PMID: 1401438J
13. Aguirre-Zero O, **Zero DT**, Proskin HM. Effect of chewing xylitol chewing gum on salivary flow rate and the acidogenic potential of dental plaque. *Caries Res* 1993;27:55-59. PubMed [journal] PMID: 8448775
14. Harding AM, **Zero DT**, Featherstone JDB, McCormack SM, Shields CP, Proskin HM. Calcium fluoride formation on sound enamel using fluoride solutions with and without lactate. *Caries Res* 1994;28:1-8. PubMed [journal] PMID: 8124691
15. Saunders RH, Davilla CE, Hayes AL, Fu J, **Zero DT**. The effectiveness of sponge-type intraoral applicators in applying topical fluorides in nursing home elderly. *Special Care* 1994;14:224-228. PubMed [journal] PMID: 7754458
16. McCormack SM, Maran CMD, Scott-Anne KM, **Zero DT**. A comparison of cell sediment and surface grown "test plaque" using scanning electron microscopy. *Scanning Microscopy* 1995;9:207-214. PubMed [journal] PMID: 8553018
17. Moss ME, **Zero DT**. An overview of caries risk assessment and its potential utility. *J Dent Educ* 1995;59:932-940. PubMed [journal] PMID: 7490374
18. **Zero DT**. *In situ* caries models. *Adv Dent Res* 1995;9:214-230; discussion 231-4. PubMed [journal] PMID: 8615944
19. **Zero DT**. Etiology of dental erosion – extrinsic factors. *Eur J Oral Sci* 1996;104:162-177. PubMed [journal] PMID: 8804884
20. Handelman S, **Zero DT**. Dr. Basil Bibby: Early fluoride investigator and intellectual provocateur. *J Dent Res* 1997;76:1621-1624. PubMed [journal] PMID: 9326893
21. **Zero DT**. Dental caries process. *Dent Clin North Am* 1999;43:635-664. PubMed [journal] PMID: 10553248
22. Lussi A, Kohler N, **Zero D**, Schaffner M, Megert B. Comparison of the erosive potential of different beverages in primary and permanent teeth using an *in vitro* model. *Eur J Oral Sci* 2000;108:110-114. PubMed [journal] PMID: 10768723
23. Hofstede MT, Ercoli C, Graser GN, Tallents, RH, Moss ME, **Zero DT**. The influence of metal surface finishing on porcelain porosity and bond strengths at the metal-ceramic interface. *J Prosth Dent* 2000;84:309-317. PubMed [journal] PMID: 11005904
24. **Zero D**, Fontana M, Lennon ÁM. Clinical applications and outcomes of using indicators of risk in caries management. *J Dent Educ* 2001;65:1126-1132. PubMed [journal] PMID: 11699989

25. Ando M, Schemehorn BR, **Zero DT**, Stookey GK. Influence of enamel thickness on quantification of mineral loss in enamel using laser-induced fluorescence. *Caries Res* 2003;37:24-28. PubMed [journal] PMID: 12566635
26. Paes Leme AF, Machado Tabchoury CM, **Zero DT**, Cury JA. The effect of fluoride dentifrice and acidulated phosphate fluoride application on early artificial carious lesions. *Am J Dent* 2003;16:91-95. PubMed [journal] PMID: 12797565
27. Owens JD, Dowsett SA, Eckert GJ, **Zero DT**, Kowolik, MJ. Partial-mouth assessment of periodontal disease in an adult population of the United States. *J Periodontol* 2003;74:1206-1213. PubMed [journal] PMID: 14514235
28. Lussi A, Jaeggi T, **Zero D**. Role of diet in the aetiology of dental erosion. *Caries Res* 2004;38(suppl1):34-44. PubMed [journal] PMID: 14685022
29. Ando M, Eckert GJ, Stookey GK, **Zero DT**. Effect of imaging geometry on evaluating natural white-spot lesions using quantitative light-induced fluorescence. *Caries Res* 2004;38:39-44. PubMed [journal] PMID: 14684976
30. **Zero DT**, Zhang JZ, Harper DS, Wu M, Kelly S, Waskow J, Hoffman M. The remineralizing effect of an essential oil fluoride mouthrinse in an intraoral caries test. *JADA* 2004;135:231-237. PubMed [journal] PMID: 15005441
31. Martínez-Mier EA, Soto-Rojas AE, Buckley CM, Margineda J, Stookey GK, **Zero DT**. [Evaluation of fluoride content in Mexican salt.] *Salud Publica Mex* 2004;46:197-198. (Spanish) PubMed [journal] PMID: 15368859
32. **Zero D**. Sugars – The Arch Criminal? *Caries Res* 2004;38:277-285. PubMed [journal] PMID: 15153701
33. **Zero DT**, Lussi A. Erosion -- Chemical and biological factors of importance to the dental practitioner. *Int Dent J* 2005;55(4 Suppl1):285-290. PubMed [journal] PMID: 16167607
34. Fontana M, Zunt S, Eckert GJ, **Zero D**. A screening test for unstimulated salivary flow measurement. *Oper Dent* 2005;30:3-8. PubMed [journal] PMID: 15765951
35. Hara AT, Ando M, Cury JA, Serra MC, González-Cabezas C, **Zero DT**. Influence of the organic matrix on root dentine erosion by citric acid. *Caries Res* 2005;39:134-138. PubMed [journal] PMID: 15741726
36. Martínez-Mier EA, Soto-Rojas AE, Buckley CM, **Zero DT**, Margineda J. Fluoride concentration of bottled water, tap water, and fluoridated salt from two communities in Mexico. *Int Dent J* 2005;55:93-99. PubMed [journal] PMID: 15880964
37. Sá Roriz Fonteles C, **Zero DT**, Moss ME, Fu J. Fluoride concentrations in enamel and dentin of primary teeth after pre- and postnatal fluoride exposure. *Caries Res* 2005;39:505-508. PubMed [journal] PMID: 1625179
38. **Zero DT**, Lussi A. Behavioral factors. *Monogr Oral Sci.* 2006; 20:100-5. PubMed [journal] PMID: 16687888
39. Hara AT, Lussi A, **Zero DT**. Biological factors. *Monogr Oral Sci* 2006; 20:88-99. PubMed [journal] PMID: 16687887
40. **Zero DT**, Hara AT, Kelly SA, González-Cabezas C, Eckert GJ, Barlow AP, Mason SC. Evaluation of a desensitizing test dentifrice using an in situ erosion remineralization model. *J Clin Dent* 2006;17:112-116. PubMed [journal] PMID: 17131714
41. Hara AT, Turssi CP, Ando M, González-Cabezas C, **Zero DT**, Rodrigues AL Jr, Serra MC, Cury JA. Influence of fluoride-releasing restorative material on root dentine secondary caries in situ. *Caries Res* 2006;40:435-439. PubMed [journal] PMID: 16946613
42. Ando M, Stookey GK, **Zero DT**. Ability of quantitative light-induced fluorescence (QLF) to assess the activity of white spot lesions during dehydration. *Am J Dent* 2006;19:15-18. PubMed [journal] PMID: 16555651
43. **Zero DT**. Dentifrices, mouthwashes, remineralization/caries arrestment strategies. *BMC Oral Health* 2006; 6 Suppl 1:S9. PubMed [journal] PMID: 16934126, PMCID: PMC2147065  
<http://www.biomedcentral.com/1472-6831/6/S1/S9>

44. Hara AT, Ando M, González-Cabezas C, Cury JA, Serra MC, **Zero DT**. Protective effect of the pellicle against erosive challenges in situ. *J Dent Res* 2006;85:612-616. PubMed [journal] PMID: 16798860
45. Fontana M, **Zero DT**. Assessing your Patient's Caries Risk. *J Am Dent Assoc* 2006;137:1231-1239. PubMed [journal] PMID: 16946427
46. Lussi A, Hellwig E, **Zero D**, Jaeggi T. Erosive tooth wear: Diagnosis-risk factors-prevention. *Am J Dent* 2006;19:319-325. Review. PubMed [journal] PMID: 17212071
47. Zandona AF, **Zero DT**. Diagnostic tools for early caries detection. *J Am Dent Assoc* 2006;137:1675-1684. PubMed [journal] PMID: 17138712
48. Totiam P, González-Cabezas C, Fontana MR, **Zero DT**. A new in vitro model to study the relationship of gap size and secondary caries. *Caries Res* 2007;41:467-473. PubMed [journal] PMID: 17827964
49. Fontana M, **Zero D**. Bridging the gap in caries management between research and practice through education: The Indiana University experience. *J Dent Educ* 2007;71:579-591. PubMed [journal] PMID: 17493966
50. Hara AT, Karlinsey RL, **Zero DT**. Dentine remineralisation by simulated saliva formulations with different Ca and P(i) contents. *Caries Res* 2008;42:51-56. PubMed [journal] PMID: 18042991
51. Griffin SO, Oong E, Kohn W, Vidakovic B, Gooch BF, and CDC Dental Sealant Systematic Review Work Group: Bader J, Clarkson J, Fontana MR, Meyer DM, Rozier G, Weintraub JA, **Zero DT**. The effectiveness of sealants in managing carious lesions. *J Dent Res* 2008;87:169-174. PubMed [journal] PMID: 18218845
52. Hara AT, **Zero DT**. Analysis of the erosive potential of calcium-containing acidic beverages. *Eur J Oral Sci* 2008;116(1):60-5. PubMed [journal] PMID: 18186733
53. **Zero DT**. Are sugar substitutes also anticariogenic? *J Am Dent Assoc* 2008;139 Suppl:9S-10S. PubMed [journal] PMID: 18460675
54. Hara AT, González-Cabezas C, Creeth J, **Zero DT**. The effect of human saliva substitutes in an erosion-abrasion cycling model. *Eur J Oral Sci* 2008;116(6):552-6. PubMed [journal] PMID: 19049526
55. Longbottom C, Ekstrand K, **Zero D**, Kambara M. Novel preventive treatment options. *Monogr Oral Sci* 2009; 21:156-63. PubMed [journal] PMID: 19494683
56. Longbottom C, Ekstrand K, **Zero D**. Traditional preventive treatment options. *Monogr Oral Sci*. 2009; 21:149-55. PubMed [journal] PMID: 19494682
57. Ekstrand KR, **Zero DT**, Martignon S, Pitts NB. Lesion activity assessment. *Monogr Oral Sci* 2009; 21:63-90. PubMed [journal] PMID: 19494676
58. Hara AT, Kelly SA, González-Cabezas C, Eckert GJ, Barlow AP, Mason SC, **Zero DT**. Influence of fluoride availability of dentifrices on eroded enamel remineralization in situ. *Caries Res* 2009;43(1):57-63. PubMed [journal] PMID: 19204389
59. **Zero DT**. Recaldent™ – Evidence for clinical activity. *Adv Dent Res* 2009;21(1):30-4. PubMed [journal] PMID: 19717408
60. Pereira AC, Eggertsson H, Martinez-Mier EA, Mialhe FL, Eckert GJ, **Zero DT**. Validity of caries detection on occlusal surfaces and treatment decisions based on results from multiple caries-detection methods. *Eur J Oral Sci* 2009;117(1):51-7. PubMed [journal] PMID: 19196318.
61. Fontana M, Catt D, , Eckert GJ, Ofner S, Toro M, Gregory RL, Ferreira Zandona A, Eggertsson H, Jackson R, **Zero D**, Sissons C. Xylitol: effects on the acquisition of cariogenic species in infants. *Pediatr Dent* 2009;31:257-266. PubMed [journal] PMID: 19552
62. **Zero DT**, Fontana M, Martínez-Mier EA, Ferreira-Zandoná A, Ando M, González-Cabezas C, Bayne S. American Contributions to Scientific Advances in the Biology, Prevention, Diagnosis and Treatment of Dental Caries. *J Am Dent Assoc* 2009;140(Suppl1):25S-34S. PubMed [journal] PMID: 19723928
63. Hara AT, González-Cabezas C, Creeth J, Parmar M, **Zero DT**. Interplay between fluoride and abrasivity of dentifrices on dental erosion-abrasion. *J Dent* 2009;37(10):781-5. PubMed [journal] PMID: 19577835

64. Gooch BF, Griffin SO, Gray SK, Kohn WG, Rozier RG, Siegal M, Fontana M, Brunson D, Carter N, Curtis DK, Donly KJ, Haering H, Hill LF, Hinson HP, Kumar J, Lampiris L, Mallatt M, Meyer DM, Miller WR, Sanzi-Schaedel SM, Simonsen R, Truman BI, **Zero DT**; Centers for Disease Control and Prevention. Preventing dental caries through school-based sealant programs: updated recommendations and reviews of evidence. *J Am Dent Assoc* 2009;40:1356-1365. PubMed [journal] PMID: 19884392
65. Milgrom P, **Zero DT**, Tanzer JM. An Examination of the advances in science and technology of prevention of tooth decay in young children since the surgeon general's report on oral health. *Acad Pediatr* 2009;9(6):404-9. NIHMSID: NIHMS144747 PubMed [journal] PMID: 19837019, PMCID: PMC2787840
66. Martínez-Mier EA, Soto-Rojas AE, Margineda J, **Zero DT**. Evaluation of the direct and diffusion methods for the determination of fluoride content in table salt. *Community Dent Health* 2009;26:204-210. NIHMSID: NIHMS199251 PubMed [journal] PMID: 20088217, PMCID: PMC2870713
67. Ferreira Zandona A, Santiago E, Eckert G, Fontana M, Ando M, **Zero DT**. The use of ICDAS combined with QLF as a caries detection method. *Caries Res* 2010;44(3):317-22. PubMed [journal] PMID: 20588022, PMCID: PMC291943
68. **Zero DT**, Creeth JE, Bosma ML, Butler A, Guibert RG, Karwal R, Lynch RJM, Martinez-Mier EA, González-Cabezas C, Kelly SA. The effect of brushing time and amount of dentifrice on fluoride delivery in vivo and enamel surface microhardness in situ. *Caries Res* 2010;44(2):90-100. PubMed [journal] PMID: 20160441
69. Ando M, Eckert GJ, **Zero DT**. Preliminary study to establish a relationship between tactile sensation with surface roughness. *Caries Res* 2010;44(1):24-8. PubMed [journal] PMID: 200903
70. Steiner-Oliveira CC, Nobre-dos-Santos M, **Zero DT**, Eckert G, Hara AT. Effect of a pulsed CO<sub>2</sub> laser and fluoride on the prevention of enamel and dentin erosion. *Arch Oral Biol* 2010;55(2):127-33. PubMed [journal] PMID: 20031117
71. Engle K, Hara AT, Matis B, Eckert GJ, **Zero DT**. Erosion and abrasion of enamel and dentin associated with at-home bleaching: an in vitro study. *J Am Dent Assoc* 2010;141(5):546-51. PubMed [journal] PMID: 20436102
72. Hara AT, **Zero DT**. The caries environment: saliva, pellicle, diet, and hard tissue ultrastructure. *Dent Clin North Am* 2010;54(3):455-67. PubMed [journal] PMID: 20630189
73. Fontana M, **Zero DT**, Beltran ED, Gray SK. Techniques for assessing tooth surfaces in school-based sealant programs. *J Am Dent Assoc* 2010;141(7):854-60. PubMed [journal] PMID: 20592405
74. Maggio B, Guibert RG, Mason SC, Karwal R, Rees GD, Kelly S, **Zero DT**. Evaluation of mouthrinse and dentifrice regimens in an in situ erosion remineralisation model. *J Dent* 2010;38 Suppl 3:S37-44. PubMed [journal] PMID: 21256403
75. Lussi A, **Zero D**, Ganss C, Ren Y. Methodology and models in erosion research. Foreword. *Caries Res* 2011;45 Suppl 1:1. PubMed [journal] PMID: 2162512
76. Shellis RP, Ganss C, Ren Y, **Zero D**, Lussi A. Methodology and models in erosion research: discussion and conclusions. *Caries Res* 2011;45 Suppl 1:69-77. PubMed [journal] PMID: 21625135
77. Lippert F, Lynch RJM, Eckert GJ, Kelly SA, Hara AT, **Zero DT**. In situ fluoride response of caries lesions with different mineral distributions at baseline. *Caries Res* 2011;45(1):47-55. PubMed [journal] PMID: 21293122
78. Scaramuccia T, Hara AT, **Zero DT**, Ferreira SS, Aokic IV, Sobral MAP. Development of an orange juice surrogate for the study of dental erosion. *Braz Dent J* 2011;22(6):473-478. PubMed [journal] PMID: 22189642
79. Martínez-Mier EA, Cury JA, Heilman J, Katz BP, Levy SM, Li Y, Maguire A, Margineda J, O'Mullane D, Phantumvanit P, Soto-Rojas AE, Stookey GK, Villa A, Wefel J, Whelton H, Whitford G, **Zero DT**, Zhang W, Zohouri V. Development of gold standard ion-selective electrode based methods for fluoride analysis. *Caries Res* 2011;45(1):3-12. PubMed [journal] PMID: 21160184, PMCID: PMC3696354
80. **Zero DT**, Zandona AF, Vail MM, Spolnik KJ. Dental caries and pulpal disease. *Dent Clin North Am* 2011;55(1):29-46. PubMed [journal] PMID: 21094717

81. Fontana M, Jackson R, Eckert G, Swigonski N, Chin J, Ferreira Zandona A, Ando M, Stookey GK, Downs S, **Zero DT**. Identification of caries risk factors in toddlers. *J Dent Res* 2011;90(2):209-14. PubMed [journal] PMID: 21173434, PMCID: PMC3144099
82. Rethman MP, Beltrán-Aguilar ED, Billings RJ, Burne RA, Clark M, Donly KJ, Hujoel PP, Katz BP, Milgrom P, Sohn W, Stamm JW, Watson G, Wolff M, Wright JT, **Zero D**, Aravamudhan K, Frantsve-Hawley J, Meyer DM American Dental Association Council on Scientific Affairs Expert Panel on Nonfluoride Caries-Preventive Agents. Nonfluoride caries-preventive agents: executive summary of evidence-based clinical recommendations. *J Am Dent Assoc* 2011;142;1065-1071. PubMed [journal] PMID: 21987836
83. Scaramucci T, Hara AT, **Zero DT**, Ferreira SS, Aoki IV, Sobral MA. In vitro evaluation of the erosive potential of orange juice modified by food additives in enamel and dentine. *J Dent* 2011;39(12):841-8. PubMed [journal] PMID: 21945448
84. Scaramuccia T, Sobrala MAP, Eckert GJ, **Zero DT**, Hara AT. In situ evaluation of the erosive potential of orange juice modified by food additives. *Caries Res* 2012;46(1):55-61. PubMed [journal] PMID: 22286364
85. **Zero DT**, Marinho VCC, Phantumvanit P. Effective use of self-care fluoride administration in Asia. *Adv Dent Res* 2012;24(1):16-21. PubMed [journal] PMID: 22261258
86. Pitts N, Duckworth RM, Marsh P, Mutti B, Parnell C, **Zero D**. Post-brushing rinsing for the control of dental caries: exploration of the available evidence to establish what advice we should give our patients. *Br Dent J*. 2012;212(7):315-20. PubMed [journal] PMID: 22498529
87. Cochrane NJ, **Zero DT**, Reynolds EC. Remineralization models. *Adv Dent Res* 2012;24(2):129-32. PubMed [journal] PMID: 22899695
88. Ferreira Zandoná A, Santiago E, Eckert GJ, Katz B, Pereira de Oliveria S, Capin O, Mau M, **Zero DT**. The natural history of dental carious lesions: A 4 year observational study. *J Dent Res* 2012;91(9):841-6. PubMed [journal] PMID: 22821238, PMCID: PMC3420396
89. Hara AT, Lippert F, **Zero DT**. Interplay between experimental dental pellicles and stannous-containing toothpaste on dental erosion-abrasion. *Caries Res* 2013;47(4):325-9. PubMed [journal] PMID: 23486168
90. Arthur RA, Waeiss RA, Hara AT, Lippert F, Eckert GJ, **Zero DT**. A defined-multispecies microbial model for studying enamel caries development. *Caries Res* 2013;47(4):318-24. PubMed [journal] PMID: 23446436
91. Ismail AI, Tellez M, Pitts NB, Ekstrand KR, Ricketts D, Longbottom C, Eggertsson H, Deery C, Fisher J, Young DA, Featherstone JDB, Evans RW, Zeller GG, **Zero D**, Martignon S, Fontana M, Zandona A. Caries management pathways preserve dental tissues and promote oral health. *Community Dent Oral Epidemiol* 2013;41(1):e12-40. PubMed [journal] PMID: 24916676
92. Lippert F, Hara AT, Martínez-Mier EA, **Zero DT**. In vitro caries lesion rehardening and enamel fluoride uptake from fluoride varnishes as a function of application mode. *Am J Dent* 2013;26:81-85. PubMed [journal] PMID: 24073530
93. Ferreira Zandoná A, Ando M, Gomez GF, Garcia-Corretjerb M, Eckert GJ, Santiago E, Katz BP, **Zero DT**. Longitudinal analyses of early lesions by fluorescence: an observational study. *J Dent Res* 2013;92 (Suppl 1):84S-89S. PubMed [journal] PMID: 23690351, PMCID: PMC3706178
94. Martínez-Mier EA, Soto-Rojas AE, Buckley C, Weitz A, Villa A, **Zero DT**. Fluoride content in plaque solids and fluid after ingestion of fluoridated milk. *J Oral Sci* 2013;55(3):233-238. PubMed [journal] PMID: 24042590
95. **Zero DT**. How the introduction of the acid-etch technique revolutionized dental practice. *J Am Dent Assoc* 2013;144 Spec No:47S-51S. PubMed [journal] PMID: 23989836; 2013; 144 Spec No:47S-51S. PubMed [journal] PMID: 24141820
96. Weyant RJ, Tracy SL, Anselmo TT, Beltrán-Aguilar ED, Donly KJ, Frese WA, Hujoel PP, Iafolla T, Kohn W, Kumar J, Levy SM, Tinanoff N, Wright JT, **Zero D**, Aravamudhan K, Frantsve-Hawley J, Meyer DM; American Dental Association Council on Scientific Affairs Expert Panel on Topical Fluoride Caries Preventive Agents. Topical fluoride for caries prevention: Executive summary of the updated clinical recommendations and supporting systematic review. *J Am Dent Assoc*. 2013;144(11):1279-1291. PubMed [journal] PMID: 2417740

97. Newby EE, Martinez-Mier EA, **Zero DT**, Kelly SA, Fleming N, North M, Bosma ML. A randomised clinical study to evaluate the effect of brushing duration on fluoride levels in dental biofilm fluid and saliva in children aged 4-5 years. *Int Dent J* 2013;63 Suppl 2:39-47. PubMed [journal] PMID: 24283283
98. Newby EE, Martinez-Mier EA, Hara A, Lippert F, Kelly SA, Fleming N, Butler A, Bosma ML, **Zero DT**. A Randomised clinical study to evaluate experimental children's toothpastes in an in-situ palatal caries model in children aged 11-14 years. *Int Dent J*. 2013;63 Suppl 2:31-8. PubMed [journal] PMID: 24283282
99. Creeth J, **Zero D**, Mau M, Bosma ML, Butler A. The effect of dentifrice quantity and toothbrushing behaviour on oral delivery and retention of fluoride in vivo. *Int Dent J* 2013;63 Suppl 2:14-24. PubMed [journal] PMID: 24283280
100. Borges AB, Scaramucci T, Lippert F, **Zero DT**, Hara, AT. Erosion protection by calcium lactate/sodium fluoride rinses under different salivary flows in vitro. *Caries Res* 2014;48:193-199 PubMed [journal] PMID: 24480975
101. Arthur RA, Kohara EK, Waeiss RA, Eckert GJ, **Zero D**, Ando M. Enamel carious lesion development in response to sucrose and fluoride concentrations and to time of biofilm formation: an artificial-mouth study. *Journal of Oral Diseases*, vol. 2014, Article ID 348032, 8 pages, 2014. NIHMSID: NIHMS656016 PubMed [journal] PMID: 25664342, PMCID: PMC4319183
102. Hara AT, **Zero DT**. The potential of saliva in protecting against dental erosion. *Monogr Oral Sci* 2014; 25:197-205. PubMed [journal] PMID: 24993267
103. Hara AT, Barlow A, Eckert G, **Zero DT**. Novel in-situ longitudinal model for the study of dentifrices on dental erosion–abrasion. *Eur J Oral Sci* 2014;122(2):161-7. PubMed [journal] PMID: 2437292.
104. Joiner A, Schäfer F, Naeenib MM, Guptab AK, **Zero DT**. Remineralisation effect of a dual-phase calcium silicate/phosphate gel combined with calcium silicate/phosphate toothpaste on acid-challenged enamel in situ. *J Dent* 2014;42 Suppl 1:S53-9. PubMed [journal] PMID: 24993856
105. Lippert F, Martinez-Mier EA, **Zero DT**. An in situ caries study on the interplay between fluoride dose and concentration in milk. *J Dent* 2014;42(7):883-90. PubMed [journal] PMID: 24513113
106. Lippert F, Hara AT, Martinez-Mier EA, **Zero DT**. Laboratory investigations into the predicted anticaries efficacy of fluoride varnishes. *Pediatr Dent* 2014;36:291-295. PubMed [journal] PMID: 25197993
107. Fontana M, Platt JA, Eckert GJ, González-Cabezas C, Yoder K, **Zero DT**, Ando M, Soto-Rojas A, Peters MC. Monitoring of sound and carious surfaces under sealants over 44 months. *J Dent Res* 2014;93(11):1070-1075. PubMed [journal] PMID: 25248613, PMCID: PMC4212464
108. Scaramucci T, Borges AB, Lippert F, **Zero DT**, Hara AT. In vitro effect of calcium-containing prescription-strength fluoride toothpastes on bovine enamel erosion under hyposalivation-simulating conditions. *Amer J Dent* 2015; 28(1):18-22. PubMed [journal] PMID: 25864237
109. Creeth JE, Kelly SA, Martinez-Mier EA, Hara A, Bosma ML, Butler A, Lynch RJM, **Zero DT**. Dose-response effect of fluoride dentifrice on remineralisation and further demineralisation of erosive lesions: a randomised in situ clinical study. *J Dent* 2015;43:823-831. PubMed [journal] PMID: 25837532
110. Scaramucci T, Borges AB, Lippert F, **Zero DT**, Hara AT. Anti-erosive properties of solutions containing fluoride and different film-forming agents. *J Dent* 2015; 28(1):18-22. PubMed [journal] PMID: 25625672
111. Ferreira Zandoná A, Soini HA, Novotny MV, Santiago E, Eckert GJ, Preisser JS, Benecha HK, Arthur R, **Zero DT**. A potential biofilm metabolite signature for caries activity – a pilot clinical study. *Metabolomics* 2015, 5:1 <http://dx.doi.org/10.4172/2153-0769.1000140>
112. Barlow A, Butler A, Mason S, **Zero D**. Exploratory randomized clinical trial of an experimental gel-to-foam fluoride dentifrice formulation using an in situ caries model. *J Clin Dent* 2015;26:33-38. PubMed PMID: 26349123.
113. Jallad M, **Zero D**, Eckert G, Ferreira Zandona A. In vitro detection of occlusal caries on permanent teeth by a visual, light-induced fluorescence and photothermal radiometry and modulated luminescence methods. *Caries Res* 2015;49:523–530. DOI: 10.1159/000437214.

114. Algarni AA, Mussi MC, Moffa EB, Lippert F, **Zero DT**, Siqueira WL, Hara AT. The impact of stannous, fluoride ions and its combination on enamel pellicle proteome and dental erosion prevention. PLoS One. 2015 Jun 1;10(6):e0128196. doi: 10.1371/journal.pone.0128196. eCollection 2015. PMID: 26030135
115. **Zero DT**, Brennan MT, Daniels TE, Papas A, Steward C, Pinto A, Al-Hashimi I, Navazesh M, Rhodus N, Sciubba J, Singh M, Wu A, Frantsve-Hawley J, Tracy S, Fox PC, Lawrence-Ford T, Cohen S, Vivino F, Hammitt KM; Sjögren's Syndrome Foundation Clinical Practice Guidelines Committee. Clinical practice guidelines for oral management in Sjögren's disease: Dental caries prevention. J Am Dent Assoc 2016;147(4):295-305. PMID: 26762707
116. Nehme M, Jeffrey P, Mason S, Lippert F, **Zero D**, Hara A. Erosion remineralization efficacy of gel-to-foam fluoride toothpastes in situ: a randomized clinical trial. Caries Res 2016;50:62–70. PMID: 26862746
117. Creeth JE, Kelly SA, González-Cabezas C, Karwal R, Martinez-Mier EA, Lynch RJM, Bosma ML, **Zero DT**. Effect of toothbrushing duration and dentifrice quantity on enamel remineralization: An in situ randomized clinical trial. J Dent. 2016 Dec;55:61-67. doi: 10.1016/j.jdent.2016.10.003. Epub 2016 Oct 4.
118. Parkinson CR, Siddiqi M, Mason S, Lippert F, Hara AT, **Zero DT**. Anticaries potential of a sodium monofluorophosphate dentifrice containing calcium sodium phosphosilicate: exploratory in situ randomised trial. Caries Res 2017;51:170-178 (DOI:10.1159/000453622)
119. Ando M, Ferreira-Zandoná AG, Eckert GJ, **Zero DT**, Stookey GK. Pilot Clinical Study to assess caries lesion activity using quantitative light-induced fluorescence (QLF) during dehydration. J Biomed Opt 2017;1:22(3):35005. doi: 10.1117/1.JBO.22.3.035005. PMID: 28280839
120. Pitts NB, **Zero DT**, Marsh PD, Ekstrand K, Weintraub JA, Ramos-Gomez F, Tagami J, Twetman S, Tsakos G, Ismail A. Dental caries. Nat Rev Dis Primers. 2017 May 25;3:17030. doi: 10.1038/nrdp.2017.30. Review. PMID: 28540937; <http://rdcu.be/s0NC>
121. Xiao J, Hara AT; Kim D, **Zero DT**, Koo H, Hwang G. Biofilm three-dimensional architecture influences in situ pH distribution pattern on the human enamel surface. Int J Oral Sci. 2017 Jun;9(2):74-79. doi: 10.1038/ijos.2017.8. Epub 2017 Apr 28
122. Parkinson CR, Siddiqi M, Mason S, Lippert F, Hara AT, **Zero DT**. In situ study to confirm the anticaries potential of a sodium monofluorophosphate dentifrice containing calcium sodium phosphosilicate. J Clin Dent. 2017 Jun;28(2):27-31. PMID: 28657702
123. **Zero DT**. Evidence for biofilm acid neutralization by baking soda. JADA 2017;148(11 suppl):10S-14S. <http://dx.doi.org/10.1016/j.adaj.2017.09.005>
124. Parkinson CR, Hara AT, Nehme M, Lippert F, **Zero DT**. A randomised clinical evaluation of a fluoride mouthrinse and dentifrice in an in situ caries model. J Dent 2018 Mar;70:59-66. doi: 10.1016/j.jdent.2017.12.015. Epub 2017 Dec 28.
125. Creeth JE, Karwal R, Hara A, **Zero DT**. A randomized in situ clinical study of fluoride dentifrices on enamel remineralization and resistance to demineralization: effects of zinc. Caries Res 2018;52:129–138 <https://doi.org/10.1159/000479823>
126. Creeth JE, Parkinson CR, Burnett G, Sanyal S, Lippert F, **Zero DT**, Hara A. Effects of a sodium fluoride- and phytate-containing dentifrice on remineralisation of enamel erosive lesions - an in situ randomised clinical study. Clin Oral Investig 2018;22(7):2543-2552 10.1007/s00784-018-2351-z. PMID: 29423713.
127. Buedel S, Lippert F, **Zero DT**, Eckert GJ, Hara AT. Impact of dentifrice abrasivity and remineralization time on erosive tooth wear. Am J Dent 2018;31:29-33.
128. Parkinson, Burnett GR, Creeth J, Lynch R, Budhawant C, Lippert F, Hara AT, **Zero DT**. Effect of phytate and zinc ions on fluoride toothpaste efficacy using an in situ caries model. J Dent 2018 Jun;73:24-31. doi: 10.1016/j.jdent.2018.03.013. Epub 2018 Mar 28.
129. Liu Y, Naha PC, Hwang G, Kim D, Huang Y, Simon-Soro A, Jung H-I, Ren Z, Li Y, Gubara S, Alawi F, **Zero D**, Hara AT, Cormode DP, Koo H. Topical ferumoxylol nanoparticles disrupt biofilms and prevent tooth decay in vivo via intrinsic catalytic activity. Nat Commun. 2018 Jul 31;9(1):2920. doi: 10.1038/s41467-018-05342-x.



130. Martinez-Mier EA, Tenuta LMA, Carey CM, Cury JA, van Loveren C, Ekstrand KR, Ganss C, Schulte A, Baig A, Benzian H, Bottenberg P, Buijs MJ, Ceresa A, Carvalho JC, Ellwood R, González-Cabezas C, Holmgren C, Knapp M, Lippert F, Joiner A, Manton DJ, Martignon S, Mason S, Jablonski-Momeni A, Plett W, Rahiotis C, Sampaio F, **Zero DT**; ORCA Fluoride in Toothpaste Analysis Work Group. European Organization for Caries Research Workshop: Methodology for determination of potentially available fluoride in toothpastes. *Caries Res* 2018 Jul 24;53(2):119-136. doi: 10.1159/000490196. [Epub ahead of print]
131. **Zero DT**, Lippert F, Hara AT, Creeth J, Newby E, Butler A, Karwal R, Constantin P, Bosma ML. In situ anticaries efficacy of dentifrices with different formulations - a pooled analysis of results from three randomized clinical trials. *J Dent* 2018;77:93–105. doi: 10.1016/j.jdent.2018.07.014
132. Ando M, Fontana M, Eckert GJ, Arthur RA, Zhang H, **Zero DT**. Objective and Quantitative Assessment of Caries Lesion Activity. *J Dent*. 2018 Nov;78:76-82. doi: 10.1016/j.jdent.2018.08.009. Epub 2018 Aug 19.
133. Slayton RL, Urquhart O, Araujo MWB, Fontana M, Guzmán-Armstrong S, Nascimento MM, Nový BB, Tinanoff N, Weyant RJ, Wolff MS, Young DA, **Zero DT**, Tampi MP, Pilcher L, Banfield L, Carrasco-Labra A. Evidence-based clinical practice guideline on nonrestorative treatments carious lesions: A report from the American Dental Association. *JADA* 2018;149(10):837-849. <https://doi.org/10.1016/j.adaj.2018.07.002>
134. Urquhart O, Tampi MP, Pilcher L, Slayton RL, Araujo MWB, Espinoza L, Fontana M, Guzman-Armstrong S, Nascimento M, Novy B, Tinanoff N, Weyant R, Wolff M, Young D, **Zero DT**, Brignardello-Petersen R, Banfield L, Parikh A, Joshi G, Carrasco-Labra A. Nonrestorative treatments for Caries: Review and Network Meta-analysis. *J Dent Res* 2018; First Published October 5, 2018 <https://doi.org/10.1177/0022034518800014>
135. Nehme M, Parkinson CR, **Zero DT**, Hara AT. Randomised study of the effects of fluoride and time on in situ remineralisation of acid-softened enamel. *Clin Oral Investig* 2019;23:4455–4463. <https://doi.org/10.1007/s00784-019-02900-5>
136. Creeth J, Burnett GR, Souverain A, Gomez Pereira P, **Zero DT**, Lippert F, Hara AT. In situ efficacy of an experimental toothpaste on enamel rehardening and prevention of demineralisation: a randomised, controlled trial. *BMC Oral Health*. 2020 Apr 17;20(1):118. doi: 10.1186/s12903-020-01081-y. PMID: 32303206; PMCID: PMC7164289.
137. Askar H, Krois J, Göstemeyer G, Bottenberg P, **Zero D**, Banerjee A, Schwendicke F. Secondary caries: What is it, and how it be controlled, detected and managed? *Clin Oral Investig*. 2020 May;24(5):1869-1876. doi: 10.1007/s00784-020-03268-7. Epub 2020 Apr 17.
138. Splieth CH, Banerjee A, Bottenberg P, Breschi L, Campus G, Ekstrand KR, Giacaman RA, Haak R, Hannig M, Hickel R, Juric H, Lussi A, Machiulskiene V, Manton DJ, Jablonski-Momeni A, Opdam NJM, Paris S, Santamaria RM, Schwendicke F, Tassery H, Ferreira Zandona A, **Zero DT**, Zimmer S, Doméjean S. How to intervene in the caries process in children: A joint ORCA and EFCD expert Delphi consensus statement. *Caries Res* 2020;54:297–305. doi:10.1159/000507692
139. Srinivasan M, Thyvallikakath TP, Cook BN, **Zero DT**. COVID-19 and saliva: A primer for dental health care professionals. *Int Dent J* First published online: 23 August 2020 <https://doi.org/10.1111/idj.12606>
140. Schwendicke F, Splieth CH, Bottenberg P, Breschi L, Campus G, Doméjean S, Ekstrand K, Giacaman RA, Haak R, Hannig M, Hickel R, Juric H, Lussi A, Machiulskiene V, Manton D, Jablonski-Momeni A, Opdam N, Paris S, Santamaria R, Tassery H, Zandona A, **Zero D**, Zimmer S, Banerjee A. How to intervene in the caries process in adults: proximal and secondary caries? An EFCD-ORCA-DGZ expert Delphi consensus statement. *Clin Oral Investig*. 2020 Sep;24(9):3315-3321. doi: 10.1007/s00784-020-03431-0. Epub 2020 Jul 9. PMID: 32643090.
141. Paris S, Banerjee A, Bottenberg P, Bresch L, Campus G, Ekstrand K, Doméjean S, Giacaman R, Haak R, Hannig M, Hickel R, Juric H, Lussi A, Machiulskiene V, Manton D, Momeni A, Nyvad B, Santamaria R, Schwendicke F, Splieth CH, Tassery H, Zandona A, **Zero D**, Zimmer S, Opdam N. How to intervene in the caries process in older adults? A joined ORCA and EFCD expert Delphi consensus statement. *Caries Res*. 2020 Dec 8;54(5-6):1-7. doi: 10.1159/000510843. Online ahead of print.
142. Hara AT, Elkington-Stauss D, Ungar PS, Lippert F, Eckert GJ, **Zero DT**. Three-Dimensional Surface Texture Characterization of In Situ Simulated Erosive Tooth Wear. *J Dent Res*. 2021 Oct;100(11):1236-1242. doi: 10.1177/00220345211005678. Epub 2021 Apr 14. PMID: 33853413; PMCID: PMC8474354.

143. Liu Y, Huang Y, Kim D, Ren Z, Oh MJ, Cormode DP, Hara AT, **Zero DT**, Koo H. Ferumoxytol Nanoparticles Target Biofilms Causing Tooth Decay in the Human Mouth. *Nano Lett.* 2021 Nov 24;21(22):9442-9449. doi: 10.1021/acs.nanolett.1c02702. Epub 2021 Oct 25. PMID: 34694125.
144. Romero MJRH, Bezerra SJC, Fried D, Yang V, Lippert F, Eckert GJ, **Zero DT**, Hara AT. Cross-polarization optical coherence tomographic assessment of in situ simulated erosive tooth wear. *J Biophotonics.* 2021 Sep;14(9):e202100090. doi: 10.1002/jbio.202100090. Epub 2021 Jun 17. PMID: 34105881; PMCID: PMC8448929.
145. Pilcher L, Pahlke L, Urquhart O, O'Brien KK, Dhar V, Fontana M, González-Cabezas C, Keels MA, Mascarenhas AK, Nascimento M, Platt J, Sabino G, Slayton R, Tinanoff N, Young D, **Zero D**, Tampi MP, Purnell D, Salazar J, Megremis S, Bienek D, Carrasco-Labra A. Direct materials for restoring caries lesions: systematic review and meta-analysis A report of the American Dental Association Council on Scientific Affairs. *J Am Dent Assoc* 2023;154(2):e1-e98 <https://doi.org/10.1016/j.adaj.2022.09.012>
146. Dhar V, Pilcher L, Fontana M, González-Cabezas C, Keels MA, Mascarenhas AK, Nascimento M, Platt J, Sabino G, Slayton R, Tinanoff N, Young D, **Zero D**, Pahlke L, Urquhart O, O'Brien KK, Carrasco-Labra A. Evidence-based clinical practice guideline on restorative treatments for caries lesions A report from the American Dental Association. *J Am Dent Assoc* 2023 Jul;154(7):551-566.e51. doi: 10.1016/j.adaj.2023.04.011
147. Felix Gomez GG, Hugenberg ST, Zunt S, Patel JS, Wang M, Rajapuri AS, Lembcke LR, Rajendran D, Smith JC, Cheriyan B, Boyd LJ, Eckert GJ, Grannis SJ, Srinivasan M, **Zero DT**, Thyvalikakath TP. Characterizing clinical findings of Sjögren's Disease patients in community practices using matched electronic dental-health record data. *PLoS One.* 2023 Jul 31;18(7):e0289335. doi: 10.1371/journal.pone.0289335. PMID: 37523369; PMCID: PMC10389720.
148. Romero MJRH, Ungar PS, Fried D, Lippert F, **Zero DT**, Zunt S, Eckert GJ, Gossweiler AG, Elkington-Stauss DJ, Tamayo-Cabeza G, Kelly AB, Bartels T, Kita C, Wewers E, Hara AT. Exploratory Analysis of Objective Outcome Measures for the Clinical Assessment of Erosive Tooth Wear. *Diagnostics (Basel).* 2023 Aug 2;13(15):2568. doi: 10.3390/diagnostics13152568. PMID: 37568931; PMCID: PMC10417370.
149. Huang Y, Liu Y, Pandey NK, Shah S, Simon-Soro A, Hsu JC, Ren Z, Xiang Z, Kim D, Ito T, Oh MJ, Buckley C, Alawi F, Li Y, Smeets PJM, Boyer S, Zhao X, Joester D, **Zero DT**, Cormode DP, Koo H. Iron oxide nanozymes stabilize stannous fluoride for targeted biofilm killing and synergistic oral disease prevention. *Nat Commun.* 2023 Sep 29;14(1):6087. doi: 10.1038/s41467-023-41687-8. PMID: 37773239; PMCID: PMC10541875.

## **Other Contributions**

Report for Working Group I: Strategies for improving the assessment of fluoride accumulation in body fluids and tissues. *Adv Dent Res*1994;8:113-115.

**Zero DT.** Introduction to the Conference on the Future Direction of Dental Postgraduate Education: A Tribute to Basil G. Bibby on his 90th Birthday. *J Dent Educ* 1995;59:546-547.

**Zero DT.** Application of clinical models in remineralization research. *J Clin Dent* 1999;10 (Spec Iss):74-85.

International Caries Detection & Assessment System Coordinating Committee. Criteria manual for the International Caries Detection and Assessment System (ICDAS II). (ICDAS II at June 2005). Available at: <http://www.icdas.org>.

International Caries Detection & Assessment System Coordinating Committee. The rationale and evidence for the International Caries Detection and Assessment System (ICDAS II). Available at: <http://www.icdas.org>.

Rethman MP, Beltrán-Aguilar ED, Billings RJ, Burne RA, Clark M, Donly KJ, Hujoel PP, Katz BP, Milgrom P, Sohn W, Stamm JW, Watson G, Wolff M, Wright JT, **Zero D**, Aravamudhan K, Frantsve-Hawley J, Meyer DM. Nonfluoride caries-preventive agents. Full report of a systematic review and evidence-based recommendations. [http://ebd.ada.org/contentdocs/clinical\\_recommendations\\_non\\_fluoride\\_caries\\_preventive\\_agents\\_full\\_report.pdf](http://ebd.ada.org/contentdocs/clinical_recommendations_non_fluoride_caries_preventive_agents_full_report.pdf)

**Zero DT.** A perspective on fluoride. Dimensions of Dental Hygiene. January 2005;3(1):28-29. <http://www.dimensionsofdentalhygiene.com/ddhright.aspx?id=419&term=fluorosis#.URFYm3d418E>

Pereira AC, Eggertsson H, Moustafa A, **Zero DT**, Eckert GJ, Mialhe FL. Evaluation of three radiographic methods for detecting occlusal caries lesions. Braz J Oral Sci 2009;8: 67-70.

Pereira AC, Eggertsson H, Gonzáles-Cabezas C, **Zero DT**, Eckert GJ, Mialhe FL. Quantitative light-induced fluorescence (QLF) in relation to other technologies and conventional methods for detecting occlusal caries in permanent teeth. Braz J Oral Sci 2011;10(1):27-32.

Nigel B. Pitts, Amid I. Ismail, Stefania Martignon, Kim Ekstrand, Gail V. A. Douglas, Christopher Longbottom Other(s) Christopher Deery, Roger Ellwood, Juliana Gomez, Justine Kolker, David Manton, Michael McGrady, Peter Rechmann, David Ricketts, Van Thompson, Svante Twetman, Robert Weyant, Andrea Ferreira Zandona, **Domenick Zero**. ICCMS™ Guide for Practitioners and Educators. 2014 <https://zenodo.org/record/853106#.WavI8rKGOM8>

Pereira-Oliveira S, Chaiben CL, Ando M, Freitas CF, **Zero D**, Azevedo-Alanis LR, Ferreira-Zandona AG. Micro CT settings for caries detection: how to optimize. Int J Eng Res Appl 2015;5(11):78-82. SSN: 2248-9622

FDI-Colgate Caries Prevention Partnership White Paper on Dental Caries Prevention and Management. Pitts N, **Zero D**, 2016. [http://www.fdiworldental.org/media/93783/2016-fdi\\_cpp-white\\_paper.pdf](http://www.fdiworldental.org/media/93783/2016-fdi_cpp-white_paper.pdf)

Arfanakis DP, Amaechi BR, Bassiouny MA, Dehghan M, Rechmann P, **Zero D**. Clinical practice guidelines on the management of acid erosion (Review). Gen Dent 2016;64(5):e6-e7.

A GLOBAL CONSENSUS for achieving a dental cavity-free future Pitts & Mayne C. Based on advice and policy recommendations from: THE ACFF MAKING CAVITIES HISTORY TASKFORCE <https://www.acffglobal.org/wp-content/uploads/2021/03/A-Global-Consensus-for-achieving-a-cavity-free-future-2.pdf>

Peres PEC, Fu J (In Memoriam), **Zero DT**, Cury JA. Effect of phenylmethylsulfonyl fluoride, a protease inhibitor, on enamel surface remineralization. Braz J Oral Sci. 2023;22:e230883 <http://dx.doi.org/10.20396/bjos.v22i00.8670883>

### **Accepted/In Press**

Yusuf H, **Zero DT**. Political and Influencing Skills for Effective Public Health. In Community Oral Health 2020

### **Submitted**

Gomez GF,1,2 Gonzalez T, Capin O, Willis L, Wang M, Boyd L, Eckert GJ, Zero DT, Thyvalikakath TP. Longevity of dental restorations in Sjogren's Disease patients using electronic dental and health record data. BMC Oral Health 2023

Fernández CE, Silva-Acevedo CA, Padilla-Orellana F, Zero D, Carvalho TS, Lussie A. Should we Wait to Brush our Teeth?: A Scoping Review. Caries Res 2023

### **M.S. Thesis**

Studies on the Acquired Pellicle and Enamel Dissolution. University of Rochester, 1979.

### **Letters**

J Dent Res Response 1982;61:1300.

NYSDJ 1993;Nov:15.

JADA Response: 2010:114.

Lippert F, **Zero DT**, Tenuta LM. Pessan et al. (2010) failed to recognize several important aspects.

J Dent Res. 2011 Jan;90(1):5.

## Abstracts

1. Handelman SL, Zero DT, Herbison RJ. Simplified technique for measuring bacterial acid dissolution of hydroxyapatite. J Dent Res 55B:B122, Abst 244 (IADR), 1976.
2. Bibby BG, Zero DT, Deeney M. Experimental white spot development in vital teeth. J Dent Res 57A:350, Abst 1102 (IADR), 1978.
3. Zero DT, Huang CT, Bibby BG. The effect of milk on in vitro caries. J Dent Res 58A:424, Abst 1335 (IADR), 1979.
4. Bibby BG, Mundorff SA, Zero DT. Plaque pH and food clearance. Abst 42 (26th ORCA Congress, Stirling), 1979.
5. Zero DT, Miller SM, Marzocchi G, Curzon MEJ. Effect of tea on the acidogenicity of dental plaque. J Dent Res 61:181, Abst 26 (IADR), 1982.
6. Zero DT. Intraoral effect of *S. mutans* produced extracellular material on enamel demineralization. Accepted for entry in the Hatton Awards Competition at the IADR. J Dent Res 64:164, Abst H14 (IADR), 1985.
7. Zero DT, Van Houte J, and Russo J. Effect of acid production from endogenous sources by *S. mutans* on enamel demineralization. J Dent Res 64:347, Abst 1552 (IADR), 1985.
8. Zero DT, Van Houte J, Russo J. Evaluation of the "cariogenic" potential of dental plaque bacteria with an intraoral enamel demineralization test. J Dent Res 64:346, Abst 1548 (IADR), 1985.
9. Zero DT, Fu J, Featherstone JDB. Salivary fluoride concentration following use of F-toothpaste and rinse. J Dent Res 66:140, Abst 268 (IADR), 1987.
10. Zero DT, Campbell JL, Yang,Z. The intraoral effect of plaque thickness and packing density on enamel demineralization. Caries Res 22:96, Abst 20 (34th ORCA Congress, Budapest), 1987.
11. Zero DT, Campbell JL, Yang Z, Barros S. Intraoral comparison of *S. sobrinus* 6715-13 and its insoluble glucan synthesis-defective mutant. J Dent Res 67:144, Abst 258 (IADR), 1988.
12. Meyerowitz C, Zero DT. Plaque pH depression and recovery in hyposalivatory subjects. J Dent Res 67:279, Abst 1331 (IADR), 1988.
13. Zero DT, Featherstone JDB, Fu J, Pedersen A, Billings RJ. Saliva and plaque 24 hour profiles after topical treatment. Joint IADR/ORCA International Symposium - Fluoride Mechanism of Action and Recommendations for Use. J Dent Res 69:828, 1990.
14. Zero DT, Cassata S, Anne K. Evaluation of intraoral enamel demineralization using the surface microhardness test. J Dent Res 68:1011, Abst. 1157 (IADR), 1989.
15. Rahbek I, Zero DT, Fu J, Proskin HM, Featherstone JDB. Relationships among iodide permeability, surface microhardness and mineral loss. J Dent Res 68:981, Abst. 918 (IADR), 1989.
16. Fu J, Zero DT, Cassata S, Anne K. Intraoral pH and organic acid profiles of *S. mutans* test plaque. J Dent Res 68:906, Abst. 314 (IADR), 1989.
17. Zero DT, Anne K, Cassata S, Fu J. Study of glucan-mediated intraoral enamel demineralization via reconstitution experiments. Caries Res 23:450, Abst. 87 (36th ORCA Congress, York), 1989.
18. Zero DT, Anne KM, Cavaretta GM, Fu J. Effect of growth at low pH on virulence of *S. mutans*. J Dent Res 69:318, Abst. 1680 (IADR), 1990.
19. Zero DT, Pedersen AM, Fu J, Hayes AL, Featherstone JDB. Comparison of fluoride retention in edentulous and dentate subjects. J Dent Res 69:205, Abst. 773 (IADR), 1990.
20. Fu J, Zero DT, Dass A, Anne KM, Cavaretta GM: Effect of plaque thickness on acid production. J.Dent Res 69:318, Abst. 1677 (IADR), 1990.
21. Featherstone JDB, Myers ML, Zero DT, Barrett NA, Pedersen AM, Shariati M. Effects of cheddar and processed cheese on de/remineralization in vivo. J Dent Res 69:181, Abst. 584 (IADR), 1990.
22. Maran CMD, Zero DT, McCormack SM, Anne KM. SEM Comparison of cell sediments and surface grown "test plaque". J Dent Res 70:338, Abst. 586 (IADR), 1991.

23. Featherstone JDB, Shariati M, Zero DT, Shields C, Myers ML, Glana RE, Pedersen AM, White D J, Bowman WD. Studies of calculus formation in a new intraoral model. J Dent Res 70:309, Abst. 347, 1991.
24. Fu J, Zero DT, Anne KM, Dass A. Effect of plaque thickness on glucose retention and acid production. J Dent Res 70:493, Abst. 1815, 1991.
25. Zero DT, Anne KM, Fu J. Adaptive response of *S. mutans* to growth at low pH. J Dent Res 70:493, Abst. 1814, 1991.
26. Saunders RH, Davila CE, Hayes AL, Fu J, Zero DT. The effectiveness of toothettes in applying fluoride in older adults. J Dent Res 70:509, Abst. 1948, 1991.
27. Zero DT, Fu J, Pedersen AM, Hayes AL, Glana RE, Featherstone JDB. The effect of low vs high fluoride on intraoral enamel remineralization. Caries Res 25:223, Abst. 38, 1991.
28. Satou N, Zero DT, Satou J, Fu J, Shintani H. Glycolytic activity of streptococci at different pH conditions in a chemostat. J Dent Res 71:1054, Abst. 130, 1992.
29. Zero DT, Pedersen AM, Glana RE, Fu J, Hayes AL, Proskin HM. Fluoride dentifrice dose-response using an intraoral model. J Dent Res 71:185, Abst. 640, 1992.
30. Featherstone JDB, Zero DT, Shariati M, White DJ. Intraoral models for the study of calculus formation and control. J Dent Res 71:234, Abst. 1026, 1992.
31. Harding AM, Zero DT, McCormack SM, Shields CP, Proskin HM, Featherstone JDB. Calcium fluoride formation on sound enamel. J Dent Res 71:201, Abst. 766, 1992.
32. Proskin HM, Zero, DT. Reliability investigation of an intraoral model. Caries Res 26:214, Abst. 20, 1992.
33. Satou N, Zero DT, Satou J, Fu J, Shintani H. Acidogenicity of streptococci grown at different chemostat pH conditions. J Dent Res 71:734, Abst. 1748, 1992.
34. Zero D, Fu J, Scott-Anne K, Proskin H. Evaluation of fluoride dentifrices using a short-term intraoral remineralization model. J Dent Res 73:272, Abst. 1363, 1994.
35. Zero D, Fu J, Hayes A, Scott-Anne K, Proskin H. Evaluation of enamel demineralization inhibitors using an intraoral caries model. J Dent Res 73:338, Abst. 1888, 1994.
36. Zero DT, Featherstone JDB, Fu J, Hayes AL, Vogel GL. Response of a de/remineralization *in situ* caries model to fluoride dentifrice. Caries Res 28:208, Abst. 99, 1994.
37. Zero DT, Scott-Anne K, Fu J. Effect of plaque composition, plaque thickness and sucrose concentration on *in situ* demineralization. J Dent Res 75:36, Abst. 149, 1996.
38. Zero DT, Fu J, Lexomboon D, Featherstone JDB. *In situ* fluoride uptake by sound and partially demineralized enamel. J Dent Res 75:194, Abst. 1409, 1996.
39. Cocola K, Scott-Anne K, Fu J, Zero D. Comparison of different *S. mutans*/*S. sanguis* plaque ratios using an intraoral model. J Dent Res 76 (Spec Iss):375, Abst. 2890, 1997.
40. Fu J, Zero D, Remolina R, Scott-Anne K. Effect of fluoride on *in situ* enamel demineralization J Dent Res 76 (Spec Iss):16, Abst. 24, 1997.
41. Heibel R, Zero D, Fu J, Glana R. *In vitro* fluoride release from glass ionomer treated with topical fluoride. J Dent Res 76 (Spec Iss):39, Abst. 208, 1997.
42. Mao Y, Zero D. Fluoride distribution and retention on oral mucosal surfaces after NaF Rinse. J Dent Res 76 (Spec Iss):35, Abst. 174, 1997.
43. Moss M, Billings RJ, Featherstone JDB, Proskin HM, Li H, Zero D. Clinical utility of caries risk assessment in caries-free children. J Dent Res 76 (Spec Iss):395, Abst. 3049, 1997.
44. Malmstrom HS, Mol A, Moss M, Handelman SL, Zero D. A structured research program in postdoctoral general dentistry. J Dent Educ 62, Abst. 154, 1998.
45. Moss ME, Billings RJ, Li H, Zero DT, Mushlin AI. Focusing epidemiology using decision analysis in oral health research. J Dent Res 77 (Spec Iss): 151, Abst. 365, 1998.

46. Li H, Moss ME, Zero DT. Comparison of decision rules for approving anticaries drug products. *J. Dent Res* 77 (Spec Iss): 188, Abst. 660, 1998.
47. Cury JA, Peres PEC, Fu J, Zero DT. Effect of PMSF on fluoride uptake and remineralization of dental enamel. *J Dent Res* 77 (Spec Iss): 215, Abst. 877, 1998.
48. Zero D, Fu J, Warburton P, Hayes A, Featherstone JDB. Fluoride levels in the oral environment from the use of IFRDs. *J Dent Res* 77 (Spec Iss B): 1017, Abst. 3084, 1998.
49. Zero DT, Barillas I, Hayes AL, Fu J, Li H. Evaluation of an intraoral model for the study of dental erosion. *Caries Res* 32: 312, Abst. 132, 1998.
50. Zero D, Fu J, Hayes A, Scott-Anne K, Glenda R, Proskin H. Anticaries efficacy of calcium phosphate dentifrice under different *in situ* model conditions. *J Dent Res* 78 (Spec Iss): 172, Abst. 529, 1999.
51. Perinpanayagam H, Czach S, Zero D. Evaluation of *in situ* root caries using surface microhardness testing. *J Dent Res* 78 (Spec Iss): 496, Abst. 3125, 1999.
52. Paes Leme AF, Tabchoury CM; Cury JA, Fu J, Zero DT. Effect of fluoride dentifrice and/or APF application on demineralized dental enamel. *J Dent Res* 78 (Spec Iss): 171, Abst. 527, 1999.
53. Mao Y, Malmstrom H, Zero DT, Moss M, Li H. Survey of halitosis in dental patients. *J Dent Res* 78 (Spec Iss): 250, Abst. 1160, 1999.
54. Fu J, Zero D, Proskin H, Hayes A, Glenda R, Scott-Anne K, Chuang P. Enamel fluoride uptake response to different fluoride dentifrice concentrations. *Caries Res* 33: 302, Abst. 64, 1999.
55. Sa Roriz Fontales C, Zero DT, Moss ME, Li H, Fu J. Primary tooth fluoride levels after prenatal and postnatal fluoride exposure. *J Dent Res* 79 (Spec Iss): 330, Abst. 1491, 2000.
56. Zero DT, Cavaretta Siegel G, Fu J, Li H. Effect of pyrophosphate on fluoride enhanced remineralization after an erosive challenge. *Caries Res* 34: 344, Abst. 105, 2000.
57. Ando M, de Josselin de Jong E, Fontana M., Stookey GK, Zero D. Evaluation of the effect of dehydration on demineralized enamel with Quantitative Light-induced Fluorescence (QLF). *Caries Res* 34: 326, Abst. 52, 2000.
58. Ozturk F, Caliskan Yanikoglu F, Fontana M., Ando M, Hayran O, Zero D, Stookey GK. Pretreatment effect of carbamide peroxide on remineralization by NaF dentifrice. *Caries Res* 34: 346, Abst. 110, 2000.
59. Ozturk F, Caliskan Yanikoglu F, Fontana M., Ando M, Hayran O, Zero D, Stookey GK. Pretreatment effect of carbamide peroxide on remineralization by APF gel. *Caries Res* 34: 346, Abst. 111, 2000.
60. Ando M, Schemehorn BR, Eckert GJ, Zero DT, Stookey GK. Influence of enamel thickness on quantification of white-spot using laser-fluorescence. *J Dent Res* 80 (Spec Iss AADR): 118, Abst. 658, 2001.
61. Francisco SB, Tabchoury CM, Del Bel Cury AA, Simoes G, Cury JA, Fu J, Zero DT. Effect of dentifrice formulation with CaCO<sub>3</sub>/MFP on inhibition of enamel demineralization. *J Dent Res* 80 (Spec Iss AADR):210, Abst. 1396, 2001.
62. Lingstrom P, Imfeld T, Zero D, Birkhed D, Kleber C. Symposium: Chewing gum and oral health. *J Dent Res* 80 (Spec Iss IADR):538, Abst. 96, 2001.
63. Ando M, Zero DT, Eckert GJ, Stookey GK. Effect of dehydration on white-spot quantification with QLF *in vitro*. *J Dent Res* 80 (Spec Iss IADR):718, Abst. 1536, 2001.
64. Pereira AC, Eggertsson H, Martinez-Mier A, Gonzalez-Cabezas C, Eckert GJ, Zero D. Comparison of methods used for dental caries diagnostic methods: a different approach. *Caries Res* 35:280, Abst 46, 2001.
65. Ando M, Zero DT, Eckert GJ, Stookey GK. Pattern of fluorescence intensity during dehydration as determined by quantitative light-induced fluorescence *in vitro*. *Caries Res* 35:270, Abst. 16, 2001.
66. Lussi AS, Zero DT. Erosive tooth wear. *Caries Res* 35:313, Abst. S6, 2002.

67. Zero DT, Zhang JZ, Kelly SA, Hoffman MJ, Waskow JR, Harper JS, Barnett ML. Efficacy of a fluoride/essential oils mouthrinse in intraoral caries test. *J Dent Res* 81 (Spec Iss IADR):A-46, Abst. 146, 2002.
68. Eggertsson H, Pereira AC, Analoui M, Eckert GJ, Zero DT. Occlusal caries detection with three radiographic methods. *J Dent Res* 81(Spec Iss IADR):A-90, Abst. 524, 2002.
69. Zero D, Smith AJ, Wefel J, Duggal M. In situ models for the study of caries and erosion. *J Dent Res* 81 (Spec Iss IADR):A-384, Abst. 3097, 2002.
70. Eggertsson H, Ando M, Ferreira-Zandona AG, Gonzalez-Cabezas C, Fontana MR, Martinez-Mier EA, Jackson RD, Krushinski C, Crawford J, Morgan DS, Stookey GK, Zero DT. Variation of image acquisition and image analysis using QLF. *Caries Res* 36:191, Abst. 54, 2002.
71. Ferreira-Zandona AG, Ekstrand DR, Eggertsson H, Zero DT. Clinical examiner reliability using a visual scoring system for early occlusal caries. *Caries Res* 36:209, Abst. 108, 2002.
72. Ando M, Zero DT, Eckert GJ, Stookey GK. Clinical repeatability of DIFOTI for caries detection. *Caries Res* 36:191, Abst. 109, 2002.
73. Fontana M, Ferreira-Zandoná A, Eggertsson H, Willis G, Dixon S, Guba Cochran C, Zero D. Cariology education program for dental students- Indiana University model. *J Dent Educ* 67:42, 2003.
74. Eggertsson H, Ferreira-Zandoná A, Ando M, González-Cabezas C, Martínez-Mier EA, Waskow JR, Eckert GJ, Zero DT. Clinical repeatability of QLF using multiple examiners. *J Dent Res* 82(Spec Iss A): Abst. 0102, 2003, ([www.dentalresearch.org](http://www.dentalresearch.org)).
75. Ando M, Eckert GI, Stookey GK, Zero DT. Effect of imaging geometry on evaluating natural white-spot lesions using Quantitative Light-induced Fluorescence. *J Dent Res* 82(Spec Iss B): Abst. 1004, 2003, ([www.dentalresearch.org](http://www.dentalresearch.org)).
76. Martinez Mier EA, Margineda J, Zero DT. Development of standard fluoride analytical methods: calculations of standard curve raw data. *J Dent Res* 82(Spec Iss B): Abst. 1595, 2003, ([www.dentalresearch.org](http://www.dentalresearch.org)).
77. Ando M, Eggertsson H, Zandoná A, González-Cabezas C, Waskow J, Krushinski C, Stookey GK, Zero DT. Ability of Quantitative Light-induced Fluorescence (QLF) to assess the status of white-spot lesions during dehydration. *Caries Res* 37:285, Abst. 53, 2003.
78. Martinez-Mier EA, Cury J, Dunipace AJ, Levy SM, Li Y, Maguiree A, O'Mullane D, Phantumvanit P, Stookey GK, Wefel JS, Whitford GM, Zero DT, Zohourie V. Development of standard fluoride analytical methods: pilot study. *Caries Res* 37:291, Abst. 70, 2003.
79. Fontana M, Zunt S, Eckert GJ, Zero D. A screening test for unstimulated salivary flow measurement. *J Dent Res* 83(Spec Iss A): Abst. 2214, 2004, ([www.dentalresearch.org](http://www.dentalresearch.org)).
80. Wilmore AM, Fontana M, Eckert GJ, Gonzalez T, Zero D. Assessing the cariogenicity of non-diet soft drinks. *J Dent Res* 83(Spec Iss A): Abst 2051, 2004, ([www.dentalresearch.org](http://www.dentalresearch.org)).
81. Martinez Mier EA, Soto-Rojas AE, Buckley C, Margineda J, Zero D. Development of standard fluoride analytical methods: methods for salt. *J Dent Res* 83(Spec Iss A): Abst. 785, 2004, ([www.dentalresearch.org](http://www.dentalresearch.org)).
82. Eggertsson H, Ferreira-Zandona AG, Jackson R, Katz B, Eckert G, Kelly SA, Mau M, Zero D, Wefel JS, Stookey GK. New visual caries detection criteria in clinical studies. *J Dent Res* 83(Spec Iss A): Abst. 2809, 2004, ([www.dentalresearch.org](http://www.dentalresearch.org)).
83. Martinez-Mier EA, Cury J, Heilman J, Levy SM, Li Y, Maguiree A, Margineda J, O'Mullane D, Phantumvanit P, Soto AE, Stookey GK, Villa A, Wefel JS, Whitford GM, Zero DT, Zhang W, Zohourie V. Development of standard fluoride analytical methods: direct analysis. *Caries Res* 38:372, Abst. 45, 2004.
84. Soto AE, , Cury J, Heilman J, Levy SM, Li Y, Maguiree A, Margineda J, Martinez-Mier EA, O'Mullane D, Phantumvanit P, Stookey GK, Villa A, Wefel JS, Whitford GM, Zero DT, Zhang W, Zohourie V. Development of standard fluoride analytical methods: precision and trueness testing. *Caries Res* 38:373, Abst. 46, 2004.
85. Hara AT, Ando M, Gonzalez-Cabezas C, Cury JA, Serra MC, Zero DT. Protective effect of the acquired enamel pellicle against different erosive challenges in situ. *Caries Res* 38:390, Abst. 97, 2004.

86. Ferreira-Zandona AG, Sutton B, Bradley A, Ekstrand DR, Eggertsson H, Temkit H, Zero D. Visual acuity and use of the ICDAS criteria – a pilot study. *Caries Res* 38:404, Abst. 140, 2004.
87. Zero D, Chin JR, Kelly S, Eckert G, Venell JA, Engelman EE. Efficacy of natural toothpastes in an in situ caries model. *J Dent Res* 84(Spec Iss A): Abst. 3259, 2005, ([www.dentalresearch.org](http://www.dentalresearch.org)).
88. Totiam P, Gonzalez-Cabezas C, Fontana M, Zero D. Effect of restoration-tooth gap size on wall lesion development. *J Dent Res* 84(Spec Iss A): Abst. 2042, 2005, ([www.dentalresearch.org](http://www.dentalresearch.org)).
89. Soto-Rojas AE, Margineda J, Zero D, Martinez-Mier EA. Assessment of methodologies for the evaluation of fluoridated salt. *J Dent Res* 84(Spec Iss A): Abst. 2662, 2005, ([www.dentalresearch.org](http://www.dentalresearch.org)).
90. Fontana M, Gonzalez-Cabezas C, Haider A, Gregory RI, Zero D. Anticariogenic effect of fluoride dentifrices exposed to different oral biofilms. *J Dent Res* 84(Spec Iss A): Abst. 3265, 2005, ([www.dentalresearch.org](http://www.dentalresearch.org)).
91. Eggertsson H, Papas A, Ciancio SG, Ferreira-Zandona A, Singh M, Shilby O, Fabiano J, Eckert GJ, Zero DT. Clinical calibration by five examiners using ICDAS on occlusal surfaces, buccal pits and lingual grooves. *Caries Res* 39:299, Abst. 37, 2005.
92. Ando M, Eckert GJ, Stookey GK, Zero DT. A theoretical evaluation of efficacy of combining examinations for occlusal caries detection in vitro. *Caries Res* 39:300, Abst. 38, 2005.
93. Soto AE, Cury J, Heilman J, Levy SM, Li Y, Maguiree A, Margineda J, Martinez-Mier EA, O'Mullane D, Phantumvanit P, Stookey GK, Villa A, Wefel JS, Whitford GM, Zero DT, Zohourie V. Standard fluoride analytical methods development: precision/ trueness testing for diffusion techniques. *Caries Res* 39:313, Abst. 76, 2005.
94. Totiam P, Gonzalez-Cabezas C, Fontana M, Zero D. Effect of gap size on secondary caries development using a new in vitro gap-model stage. *Caries Res* 39:319-320, Abst. 95, 2005.
95. Totiam P, Fontana M, Zero D, Gonzalez-Cabezas C. Effect of different sugars on secondary caries development. *J Dent Res* 85(Spec Iss A): Abst. 1551, 2006, ([www.dentalresearch.org](http://www.dentalresearch.org)).
96. Hara AT, Zero, DT. Influence of enamel roughness and pellicle on erosion: preliminary data. *J Dent Res* 85(Spec Iss A): Abst. 490, 2006, ([www.dentalresearch.org](http://www.dentalresearch.org)).
97. Fontana M, Jackson R, Toro M, Ferreira Zandona A, Ando M, Chin J, Gregory RL, Kelly S, Eckert G, Haider A, Stookey GK, Zero D. Association between caries risk behaviors, health perceptions-beliefs, and cariogenic bacteria. *J Dent Res* 85(Spec Iss A): Abst. 1556, 2006, ([www.dentalresearch.org](http://www.dentalresearch.org)).
98. Fontana M, Toro M, Ferreira Zandona A, Eggertsson H, Gregory RL, Jackson R, Dean J, Kelly S, Haider A, Eckert G, Zero D. Caries predictors in a cohort of mothers and their infants. *J Dent Res* 85(Spec Iss A): Abst. 1558, 2006, ([www.dentalresearch.org](http://www.dentalresearch.org)).
99. Karlinsey RL, Zero DT. Application of a nanocomposite formulation for remineralization of lesioned enamel. *J Dent Res* 85(Spec Iss B): Abst. 2456, 2006, ([www.dentalresearch.org](http://www.dentalresearch.org)).
100. Zero D, González-Cabezas C, Kelly SA, Proskin HM. In situ evaluation of a new sugar-free chewing gum formulation. *J Dent Res* 85(Spec Iss B): Abst. 2537, 2006, ([www.dentalresearch.org](http://www.dentalresearch.org)).
101. Eggertsson H, Singh ML, Fabiano JA, Shibly O, Russell D, Papas AS, Ciancio S, Zero D. Clinical calibration of ICDAS visual examination in two geographical locations. *J Dent Res* 85(Spec Iss B): Abst. 0526, 2006, ([www.dentalresearch.org](http://www.dentalresearch.org)).
102. Soto AE, Cury JA, Heilman J, Levy SM, Li Y, Maguiree A, Margineda J, Martinez-Mier EA, O'Mullane D, Phantumvanit P, Stookey GK, Villa A, Wefel JS, Whitford GM, Zero DT, Zohourie V. Standard fluoride analytical methods development: fluoride analysis of bone by diffusion techniques. *Caries Res* 40:303, Abst. 2, 2006.
103. Zero DT, Hara AT, Kelly SA, González-Cabezas C, Eckert GJ, Barlow AP, Mason SC. Evaluation of a test dentifrice using an in situ erosion remineralization model. *Caries Res* 40:322, Abst. 57, 2006.
104. Hara AT, Karlinsey RL, Zero DT. Dentin remineralization by simulated saliva formulations with different Ca and P concentrations. *Caries Res* 40:323, Abst. 58, 2006.



105. Karlinsey RL, Hara AT, Yi K, Duhn CW, Zero DT. Nucleation of hydroxyapatite and calcium phosphate mineral on a self-assembled crystalline ceramic immersed in simulated and human saliva. *Caries Res* 40:341, Abst. 110, 2006.
106. Ando M, Eckert GJ, Zero DT. Preliminary study to establish a relationship between visual assessment/tactile sensation and surface roughness. *Caries Res* 40:343, Abst. 117, 2006.
107. Zero D, Proskin HM, Buch RM, Kollar C, Bosma ML, Smith SR. Efficacy of marketed dentifrices using an in situ caries model. *J Dent Res* 86(Spec Iss A): Abst. 502, 2007, ([www.dentalresearch.org](http://www.dentalresearch.org)).
108. Hara AT, González-Cabezas C, Zero DT. Evaluation of pH-stat to assess the erosive potential of beverages. *J Dent Res* 86(Spec Iss A): Abst. 1033, 2007, ([www.dentalresearch.org](http://www.dentalresearch.org)).
109. Saunders FG, Bosma MP, Buch RM, Kollar C, Martinez-Mier EA, Zero DT. Evaluation of plaque fluid fluoride retention after dentifrice application. *J Dent Res* 86(Spec Iss A): Abst. 511, 2007, ([www.dentalresearch.org](http://www.dentalresearch.org)).
110. Fontana M, Jackson R, Eckert G, Ferreira A, Chin J, Ando M, Toro M, Kelly S, Haider A, Gregory R, Stookey G, Zero D. Predicting caries risk in underserved toddlers. *J Dent Res* 86(Spec Iss A): Abst. 2164, 2007, ([www.dentalresearch.org](http://www.dentalresearch.org)).
111. Eckert G, Fontana M, Jackson R, Chin JR, Toro M, Kelly S, Stookey G, Zero D. Ethnic differences in habits and dental practices of toddlers. *J Dent Res* 86(Spec Iss A): Abst. 2173, 2007, ([www.dentalresearch.org](http://www.dentalresearch.org)).
112. Ferreira Zandona AG, Eggertsson H, Delgado E, Hernandez P, Eckert GJ, Mau MS, Tran J, Zero D. A training and calibration on a using ICDAS in association with light fluorescence. *Caries Res* 41:291, Abst. 64, 2007.
113. Ando M, Ferreira Zandona AG, Eckert GJ, Stookey GK, Zero DT. Clinical pilot study to assess caries activity using Quantitative Light-induced Fluorescence (QLF) during dehydration. *Caries Res* 41:295, Abst. 75, 2007.
114. Hara AT, González-Cabezas C, Zero DT. Test of human saliva substitutes in an erosion-abrasion cycling model. *Caries Res* 41:306, Abst. 107, 2007.
115. Zero DT, Kelly SA, Proskin HM, Bosma ML, Buch RM, Smith SR. Comparison of marketed NaF and MFP dentifrice products using an in situ caries model. *Caries Res* 41:313, Abst. 130, 2007.
116. Hara AT, Zero DT, Kelly SA, González-Cabezas C, Eckert GJ, Barlow AP, Mason SC. Comparative evaluation of fluoridated toothpastes using an in situ erosion remineralization model. *Caries Res* 41:314, Abst. 131, 2007.
117. Zero DT. Keynote Address: Improvements in clinical diagnosis and management of caries. *J Dent Res* 87(Spec Iss A): Abst. 0060, 2008, ([www.dentalresearch.org](http://www.dentalresearch.org)).
118. Eggertsson H, Zandona A, Delgado E, Santiago E, Hernandez P, Eckert GJ, Katz B, Mau M, Tran J, Zero DT. Comparison of caries detection in clinic using ICDAS and QLF-I. *J Dent Res* 87(Spec Iss A): Abst. 0907, 2008, ([www.dentalresearch.org](http://www.dentalresearch.org)).
119. Ferreira Zandona A, Eggertsson H, Delgado E, Santiago E, Hernandez P, Eckert GJ, Katz B, Mau M, Tran J, Zero DT. Caries prevalence in Hispanic children using ICDAS and QLF-I. *J Dent Res* 87(Spec Iss A): Abst. 0062, 2008, ([www.dentalresearch.org](http://www.dentalresearch.org)).
120. Ando M, Eckert GJ, Zero DT. Longitudinal assessment of dynamic process of caries lesion with microfocus computed tomography. *Caries Res* 42:204, Abst. 57, 2008.
121. Ferreira Zandoná AG, Eggertsson H, Eckert GJ, Mau MS, Tran J, Zero DT. Using ICDAS and QLF-I for assessing caries incidence within a short interval. *Caries Res* 42:226, Abst. 120, 2008.
122. Eggertsson H, Ferreira Zandona AG, Santiago E, Eckert GJ, Katz B, Mau MS, Tran J, Zero DT. Assessment of lesion activity scoring by lesion progression over 8 months. *Caries Res* 42: 228, Abst. 127, 2008.
123. Zero D, Fu J, Warburton P, Hayes A, Glana R, Proskin HM, Tung MS. Effect of calcium and phosphate containing fluoride rinse on re/demineralization. *J Dent Res* 87 (Spec Iss B): Abst. 0111, 2008, ([www.dentalresearch.org](http://www.dentalresearch.org)).

124. Ando M, Eckert GJ, Zero D. Longitudinal assessment of dynamic caries process with microfocus computed tomography. *J Dent Res* 87 (Spec Iss B): Abst. 1178, 2008, ([www.dentalresearch.org](http://www.dentalresearch.org)).
125. Hara AT, Kanter M, Gonzales-Cabezas C, Zero DT. Toothbrushing abrasion resistance of remineralized erosive lesions. *J Dent Res* 87 (Spec Iss B): Abst. 2495, 2008, ([www.dentalresearch.org](http://www.dentalresearch.org)).
126. Zero DT, Bosma ML, Newby EE, Kelly S, Martinez-Mier EA, Proskin HM. In situ remineralization, fluoride uptake and retention from dentifrice treatment. *J Dent Res* 88 (Spec Iss A): Abst. 23, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
127. Shirodaria S, Mason SC, Patel K, Hara AT, Zero DT. Erosion protection of a novel anti-erosion mouthrinse and dentifrice regimen. *J Dent Res* 88 (Spec Iss A): Abst. 24, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
128. Fontana M, Platt JA, Ando M, Soto A, Eckert GJ, Yoder KM, Gonzalez-Cabezas C, Zero DT. Assessment of methods to measure caries in vivo under sealants. *J Dent Res* 88 (Spec Iss A): Abst. 1618, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
129. Ferreira Zandona A, Eggertsson H, Santiago E, Eckert GJ, Katz B, Mau M, Tran J, Zero DT. ICDAS-II and QLF-I for monitoring early lesions - 1 year data. *J Dent Res* 88 (Spec Iss A): Abst. 2824, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
130. Hara AT, Barlow AP, Eckert GJ, Zero DT. Long-term in situ effect of fluoridated dentifrice on dental erosion-abrasion. *J Dent Res* 88 (Spec Iss A): Abst. 2945, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
131. Ando M, Fontana M, Platt J, Soto A, Eckert GJ, Zero D. Comparison of two-QLF thresholds for caries quantification under sealants *J Dent Res* 88 (Spec Iss A): Abst. 3339, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
132. Zandona A, Eggertsson H, Santiago E, Garcia-Corretjer M, Eckert GJ, Katz B, Mau M, Tran J, Zero DT. Longitudinal study: Comparison between clinical ICDAS-II scores vs. QLF-I images. *J Dent Res* 88 (Spec Iss A): Abst. 3359, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
133. Eggertsson H, Ferreira Zandona A, Santiago E, Eckert GJ, Katz B, Mau M, Tran J, Zero DT. Assessment of lesion activity scoring by progression over 12 months. *J Dent Res* 88 (Spec Iss A): Abst. 3365, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
134. Maggio B, Hara AT, Zero DT, Kelly S, Barlow A, Mason SC. An improved In situ model to evaluate erosive protection. *J Dent Res* 88 (Spec Iss A): Abst. 3367, 2009, ([www.dentalresearch.org](http://www.dentalresearch.org)).
135. Zero DT, Bosma ML, Newby E, Yadav M, Kelly S. In situ comparison of the retention phase of fluoride delivery from dentifrices. *Caries Res* 43: Abst. 77, 2009.
136. Creeth JE, Zero DT, Bosma ML, Butler A, Guibert RG, Karwal R, Lynch RJM, North M, Angeles Martinez-Mier E, González-Cabezas C, Kelly SA. Effect of brushing time and dentifrice dose on orally retained fluoride in vivo. *Caries Res* 43: Abst. 78, 2009.
137. Newby EE, Bosma ML, Yadav M, Kelly S, Martinez-Mier EA, Zero DT. Evaluation of plaque fluid fluoride retention after dentifrice application. *Caries Res* 43: Abst. 82, 2009.
138. Eggertsson H, Saemundsson SR, Eckert GJ, Nelson S, Ferreira Zandona AG, Fontana MR, Zero DT. Repeatability of ICDAS from clinical studies. *Caries Res* 43: Abst. 90, 2009.
139. Ferreira Zandona AG, Eggertsson H, Santiago E, Eckert GJ, Katz B, Mau MS, Tran J, Zero DT. Capturing activity with ICDAS and QLF in a longitudinal study. *Caries Res* 43: Abst. 99, 2009.
140. Ando M, Shaikh S, Eckert GJ, Fontana M, Zero DT. Reflection and surface roughness measurements for characterization of caries progression. *Caries Res* 43: Abst. 101, 2009.
141. Garcia-Corretjer M, Ferreira Zandona AG, Eggertsson H, Ando M, Santiago E, Eckert GJ, Katz B, Zero DT. Assessment of lesion progression by QLF. *Caries Res* 43: Abst. 109, 2009.
142. Barlow AP, Zero DT, Hara AT, Kelly SA, González-Cabezas C, Mason SC. Comparative performance of toothpastes with different fluoride sources in an in situ erosion remineralization model. *Caries Res* 43: Abst. 129, 2009.
143. Mason SC, Barlow AP, Zero DT, Hara AT, Kelly SA, González-Cabezas C. Comparative performance of fluoridated toothpastes in an in situ erosion remineralization model. *Caries Res* 43: Abst. 130, 2009.

144. Santiago EA, Ferreira Zandona AG, Eggertsson H, Eckert GJ, Toro C, Cuadrado L, Elías-Boneta A, Katz B, Mau, MS, Tran J, Zero DT. ICDAS for monitoring early lesion treatment: a longitudinal study. *Caries Res* 43: Abst. 139, 2009.
145. Hara AT, González-Cabezas C, Zero DT. Toothbrushing abrasion of eroded dental substrates by whitening dentifrices. *Caries Res* 43: Abst. 164, 2009.
146. Creeth J, Gonzalez-Cabezas C, Eder J, Bosma M, Zero D. Increasing exposure time and dentifrice concentration increase enamel remineralization in-vitro. *J Dent Res* 89 (Spec Iss A): Abst. 69, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
147. Zero D, Creeth J, Bosma M, Guibert RG, Karwal R, Lynch R, Gonzalez-Cabezas C, Kelly S. Effect of dentifrice usage regimen on fluoride efficacy in situ. *J Dent Res* 89 (Spec Iss A): Abst. 70, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
148. Hara A, Engle K, Gonzalez-Cabezas C, Zero D. Evaluation of hexametaphosphate-containing dentifrice on root dentin erosion-abrasion. *J Dent Res* 89 (Spec Iss A): Abst. 528, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
149. Ando M, Garcia-Corretjer M, Eckert G, Santiago E, Katz B, Zero D, Zandona A. Lesion progression evaluated by fluorescence image analyses. *J Dent Res* 89 (Spec Iss A): Abst. 893, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
150. Fontana M, Platt J, Ando M, Soto-Rojas AE, Eckert G, Yoder K, Gonzalez-Cabezas C, Zero D. One-year assessment of caries measurement in vivo under sealants. *J Dent Res* 89 (Spec Iss A): Abst. 896, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
151. Martinez-Mier EA, Buckley C, Chandrappa P, Kelly SA, Zero DT. Fluoride measurement of plaque and plaque fluid from an in situ model. *Caries Res* 44: Abst. 105, 2010.
152. Ferreira Zandona AG, Santiago E, Eckert GJ, Zero DT. Incidence of caries around restorations on a longitudinal study using ICDAS. *Caries Res* 44: Abst. 120, 2010.
153. Ekstrand KR, Martignon S, Lara JS, Deery C, Douglas G, Eggertsson H, Gamboa LF, Ferreira-Zandona A, Kolker J, Longbottom C, Pitts N, Ricketts D, Sohn W, Zero D. How reliable are members of the ICDAS core group at using the ICDAS? An in vitro study. *Caries Res* 44: Abst. 128, 2010.
154. Ando M, Sakagami T, Eckert GJ, Zero DT. Thermal images under pulse heating for quantification of sound, de- and re-mineralized enamel in vitro. *Caries Res* 44: Abst. 136, 2010.
155. Hara AT, Lippert F, Zero DT. Prevention of dental erosion-abrasion development by mouthrinses. *Caries Res* 44: Abst. 174, 2010.
156. Rocha CT, Corona SAM, Hara AT, Zero DT. In vitro evaluation of different fluoride treatments on hydrochloric acid-induced erosion. *Caries Res* 44: Abst. 175, 2010.
157. Ferreira Zandona AG, Fontana M, Santiago E, Eckert GJ, Zero DT. Longitudinal assessment of caries risk in a Hispanic population. *J Dent Res* 89 (Spec Iss B): Abst. 286, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
158. Rodrigues Ribeiro T, Fontana M, Eckert GJ, Zero DT, Ando M. Comparison between single and multiple-species microbial caries-model through surface characterization. *J Dent Res* 89 (Spec Iss B): Abst. 921, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
159. Lippert F, Martinez Mier EA, Hara AT, Zero DT. Enamel fluoride uptake (EFU) study comparing different acid etch techniques. *J Dent Res* 89 (Spec Iss B): Abst. 928, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
160. Ando M, Rodrigues Ribeiro T, Fontana M, Eckert GJ, Zero D. Evaluation of microfocus computed-tomography for lesion assessment. *J Dent Res* 89 (Spec Iss B): Abst. 1610, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
161. Maggio B, Mason S, Zero D, Kelly S, Guibert RG, Karwal R. Evaluation of dentifrice/mouthrinse regimens in an in situ erosion model. *J Dent Res* 89 (Spec Iss B): Abst. 1946, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
162. Santiago E, Zandona A, Eckert G, Zero D. Analysis of trends in treatments of approximal lesions. *J Dent Res* 89 (Spec Iss B): Abst. 2512, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).

163. Scaramucci T, Hara AT, Ferreira S, Aoki IV, Sobral MAP, Zero DT. Development of a synthetic orange juice surrogate for erosion studies. J Dent Res 89 (Spec Iss B): Abst. 4197, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
164. Rocha CT, Corona SAM, Hara AT, Zero DT. *In vitro* effect of CO<sub>2</sub> laser on enamel erosion prevention. J Dent Res 89 (Spec Iss B): Abst. 4679, 2010, ([www.dentalresearch.org](http://www.dentalresearch.org)).
165. Srinivasan M, Zero D, Prakasam S. Soluble toll-like receptor 2 and 4 in saliva as surrogate markers of active disease versus stability in chronic periodontitis. 3rd Fall Focused Symposium Salivary Diagnostics, AADR, 2010.
166. Scaramucci T, Hara AT, Zero DT, Ferreira SS, Aoki IV, Sobral MAP. Erosive potential of modified orange juices in enamel and dentin. J Dent Res 90 (Spec Iss A): Abst. 731, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
167. Hara AT, Barlow A, Eckert G, Zero DT Influence of saliva properties and chemical composition on erosion. J Dent Res 90 (Spec Iss A): Abst. 735, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
168. Creeth J, Kelly S, Butler A, Guibert R, Bosma M, Zero DT. Enamel remineralization potential of dentifrices incorporating different fluoride salts in-situ. J Dent Res 90 (Spec Iss A): Abst. 1545, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
169. Lippert F, Zero DT. Dose-response effects of zinc and fluoride on caries lesion remineralization. J Dent Res 90 (Spec Iss A): Abst. 1548, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
170. Ando M, Fontana M, Eckert G, Zero DT. Reproducibility of demineralized enamel by multi-species microbial caries-model. J Dent Res 90 (Spec Iss A): Abst. 2628, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
171. Sa Roriz Fonteles C, Fontana, M, Eckert G, Zero DT. Anticaries efficacy of Lippia sidoides essential oil, carvacrol and thymol. J Dent Res 90 (Spec Iss A): Abst. 3028, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
172. Ferreira Zandona A, Santiago EA, Eckert G, Zero DT. ICDAS assessment of caries incidence and progression over 40 months. J Dent Res 90 (Spec Iss A): Abst. 3361, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
173. Rocha CT, Turssi CP, Corona SAM, Hara AT, Zero DT. Synergistic effect of CO<sub>2</sub>-laser and SnF<sub>2</sub> on primary teeth erosion. J Dent Res 90 (Spec Iss A): Abst. 3389, 2011 ([www.dentalresearch.org](http://www.dentalresearch.org)).
174. Ando M, Sakagami T, Eckert G, Zero T. Evaluation of thermal images under pulse heating for quantification of sound, de- and re-mineralized enamel. Caries Res 45: Abst. 113, 2011.
175. Ferreira Zandona A, Santiago E, Eckert G, Zero D. Caries lesions progression over 48-months using ICDAS and activity assessment. J Dent Res 91 (Spec Iss A): Abst. 8, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
176. Lippert F, Hara A, Zero D. Fluoride response of human and bovine enamel under pH-cycling conditions. J Dent Res 91 (Spec Iss A): Abst. 139, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
177. Hara A, Lippert F, Nehme M, Barlow A, Mason S, Zero D. In vitro study of relevant parameters for in situ erosion-abrasion model. J Dent Res 91 (Spec Iss A): Abst. 335, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
178. Arthur RA, Waeiss RA, Hara A, Lippert F, Zero D. In vitro biofilm-associated enamel demineralization under distinct sugar exposure. J Dent Res 91 (Spec Iss A): Abst. 694, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
179. Kohara EK, Arthur RA, Eckert G, Zero D, Ando M. Effect on sucrose/fluoride variations for enamel demineralization using microbial caries-model. J Dent Res 91 (Spec Iss A): Abst. 1419, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
180. Kohara EK, Arthur RA, Eckert G, Zero D, Ando M. Effects of different microbial-induced demineralization cycles on carious lesion progression. J Dent Res 91 (Spec Iss B): Abst. 831, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
181. Parkinson C, Siddiqi M, Guibert R, Lippert F, Martinez Mier EA, Hara A, Kelly S, Zero D. In situ remineralization efficacy of a calcium sodium phosphosilicate+fluoride dentifrice. J Dent Res 91 (Spec Iss B): Abst. 1167, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
182. Zandona AF, Soini H, Novotny M, Santiago E, Eckert G, Zero D. A signature biomarker for caries activity a pilot clinical study. J Dent Res 91 (Spec Iss B): Abst. 3116, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).

183. Xiao J, Hara A, Zero D, Koo H. Exopolysaccharides-enmeshed microcolonies create spatial pH heterogeneity across 3D biofilm architecture. *J Dent Res* 91 (Spec Iss B): Abst. 3121, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
184. Creeth J, Kelly K, Mau M, Karwal R, North M., Bosma M, Zero DT. Effect of dentifrice usage regimen on oral retention of fluoride. *J Dent Res* 91 (Spec Iss C): Abst. 26, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
185. Lynch RJ, Lippert F, Butler A, Creeth J, Bosma M, Zero DT. Fluoride substitution in mineral deposited during remineralisation in situ. *J Dent Res* 91 (Spec Iss C): Abst. 624, 2012. ([www.dentalresearch.org](http://www.dentalresearch.org)).
186. Hara AT, Lippert F, Zero DT. Interplay between salivary pellicle proteins and stannous-containing toothpaste on dental erosion-abrasion. *Caries Res* 46: Abst. 23, 2012.
187. Ferreira Zandona AG, Peterson S, Bretz W, Santiago E, Eckert GJ, Zero DT. 16S rDNA analyses of dental biofilm microbiome of caries active and caries free children. *Caries Res* 46: Abst. 44, 2012.
188. Ando M, Kohara EK, Arthur RA, Eckert G, Fontana M, Zero DT. Quantitative and qualitative assessment of caries lesion activity. *J Dent Res* 92 (Spec Iss A): Abst. 9, 2013. ([www.dentalresearch.org](http://www.dentalresearch.org)).
189. Creeth JE, Kelly KA, Martinez-Mier EA, Hara AT, Bosma ML, Butler A, Zero DT. Increasing fluoride concentration increases enamel erosive lesion remineralization in-situ. *J Dent Res* 92 (Spec Iss A): Abst. 13, 2013. ([www.dentalresearch.org](http://www.dentalresearch.org)).
190. Newby EE, Martinez-Mier EA, Zero DT, Kelly KA, Fleming N, North M, Bosma ML. Brushing duration and saliva and biofilm fluid fluoride in children. *J Dent Res* 92 (Spec Iss A): Abst. 1718, 2013. ([www.dentalresearch.org](http://www.dentalresearch.org)).
191. Ferreira Zandona A, Santiago EA, Gomez G, Ando M, Garcia-Corretjer M, Eckert G, Zero DT. Caries lesions progression over 48 months by fluorescence image analyses. *J Dent Res* 92 (Spec Iss A): Abst. 2894, 2013. ([www.dentalresearch.org](http://www.dentalresearch.org)).
192. Ando M, Sakagami T, Narita D, Zero D. Evaluation of thermal images under pulse heating for quantification of natural non-cavitated lesions. *Caries Res* 47: Abst. 99, 2013.
193. Hara AT, Buedel S, Lippert F, Eckert G, Zero DT. Influence of dentifrice abrasivity and remineralization time on enamel toothbrushing abrasion. *Caries Res* 47: Abst. 195, 2013.
194. Ferreira Zandona AG, Santiago E, Eckert GJ, Zero DT. Using ICDAS and QLF-I combined to predict caries lesion progression. *Caries Res* 47: Abst. 219, 2013.
195. Ferreira Zandona AG, Soini H, Vivaldi J, Novotny M, Eckert GJ, Zero D. Metabolites from sound and caries-active sites - a pilot study. *J Dent Res* 93 (Spec Iss A): Abst. 158, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
196. Algarni AA, Siqueira WL, Lippert F, Zero DT, Hara AT. Interaction between tin/fluoride-containing solutions and acquired pellicle on erosion in-vitro. *J Dent Res* 92 (Spec Iss A): Abst. 694, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
197. Hara A, Lippert F, Martinez-Mier EA, Eckert GJ, Zero D. Fluoride-varnish efficacy on in situ remineralization of enamel caries-like lesions. *J Dent Res* 93 (Spec Iss A): Abst. 776, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
198. Ando M, Sakagami T, Zhang H, Eckert GJ, Zero D. Evaluation of natural non-cavitated caries lesions for severity and activity. *J Dent Res* 93 (Spec Iss A): Abst. 1319, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
199. Lynch RJM, Creeth JE, Butler A, Lippert F, Bosma ML, Zero DT. Deposition of fluoridated apatite during remineralisation in situ. *J Dent Res* 93 (Spec Iss B): Abst. 81, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
200. Gordon J, Zero DT, Newby EE, Martinez-Mier EA, Hara AT, Lippert F, Kelly SA, Butler A, Bosma ML. An in-situ caries model study in children evaluating experimental toothpastes. *J Dent Res* 93 (Spec Iss B): Abst. 624, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
201. Creeth JE, Zero DT, Kelly SA, Martinez-Mier EA, Hara AT, Bosma ML, Newby EE. Relative remineralisation potential of sodium fluoride dentifrices in situ. *J Dent Res* 93 (Spec Iss B): Abst. 1339, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).

202. Zero DT, Kelly SA, Hara AT, Martinez-Mier EA, Bosma ML, Newby EE, Creeth JE. In situ remineralization potential of NaF and MFP retained post-toothbrushing. *J Dent Res* 93 (Spec Iss B): Abst. 1340, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
203. Aldosari MA, Scaramucci T, Liu SS, Warrick-Polakoff JM, Zero D, Eckert GJ, Hara AT. Susceptibility of partially-desalivated rats to dental erosion by calcium-supplemented beverages. *J Dent Res* 93 (Spec Iss B): Abst. 1389, 2014. ([www.dentalresearch.org](http://www.dentalresearch.org)).
204. Ando M, Goodwine B, Eckert GJ, Zero DT. Effect of angulation on quantification of caries lesions by photothermal-radiometry/modulated-luminescence. *J Dent Res* 94 (Spec Iss A): Abst. 350, 2015. ([www.dentalresearch.org](http://www.dentalresearch.org)).
205. Jallad M, Ferreira Zandona A, Zero DT, Eckert G. Detection of primary occlusal caries with ICDAS, PTR/LUM and QLF. *J Dent Res* 94 (Spec Iss A): Abst. 1064, 2015. ([www.dentalresearch.org](http://www.dentalresearch.org)).
206. Jallad M, Ferreira Zandona A, Zero DT, Eckert G. Occlusal caries detection under opaque sealant with PTR/LUM and QLF. *J Dent Res* 94 (Spec Iss A): Abst. 1065, 2015. ([www.dentalresearch.org](http://www.dentalresearch.org)).
207. Creeth J, Butler A, Martinez-Mier E, Hara AT, Newby EE, Lippert F, Bosma M, Zero DT. Correlation between enamel fluoride uptake and acid resistance in situ. *J Dent Res* 94 (Spec Iss A): Abst. 4107, 2015. ([www.dentalresearch.org](http://www.dentalresearch.org)).
208. Nehme M, Mason S, Shaw D, Wawerczak W, Zero D, Hara A. Impact of fluoride dentifrices with different surfactant systems on in situ erosion prevention of demineralization. *Caries Res* 49: Abst. 107, 2015. <http://www.karger.com/doi/10.1159/000381323>
209. Nehme M, Hall C, Shneyer L, Mason S, Martinez-Mier A, Zero D, Hara A. Evaluation of a fluoride dentifrice/mouthrinse regimen in a short-term in situ remineralisation model. *Caries Res* 49: Abst. 108, 2015. <http://www.karger.com/doi/10.1159/000381323>
210. Zero D, Brennan M, Daniels T, Stewart C, Papas A, Pinto A, Sciubba J, Al-Hashimi I, Navazesh M, Rhodus N, Singh M, Wu A, Fox P, Cohen S, Ford TL, Tracy S, Frantsve-Hawley J, Hammitt K, Vivino F. Sjogren's Syndrome Foundation (SSF) clinical practice guidelines for oral disease management: caries prevention. *Scand J Immunol* 81:376, 2015. doi: 10.1111/sji.12292.
211. Vivino FB, Zero D, Brennan M, Daniels T, Stewart C, Papas A, Pinto A, Sciubba J, Al-Hashimi I, Navazesh M, Rhodus NL, Singh M, Wu A, Fox P, Cohen S, Lawrence Ford T, Tracy S, Frantsve-Hawley J, Hammitt KM. Sjögren's Syndrome Foundation Clinical Practice Guidelines for Oral Disease Management: Caries Prevention [abstract]. *Arthritis Rheumatol.* 2015; 67 (suppl 10). <http://acrabstracts.org/abstract/sjgrens-syndrome-foundation-clinical-practice-guidelines-for-oral-disease-management-caries-prevention/>
212. Creeth J, Karwal R, Zero D, Hara A. Fluoride-induced enamel remineralisation and demineralisation resistance in-situ: effects of zinc. *J Dent Res* 95 (Spec Iss B): Abst. 0165, 2016. ([www.dentalresearch.org](http://www.dentalresearch.org)).
213. Lynch RJM, Karwal R, Bosma ML, Lippert F, Zero DT. Effect of zinc on fluoride-induced remineralisation in situ. *J Dent Res* 95 (Spec Iss B): Abst. 0164, 2016. ([www.dentalresearch.org](http://www.dentalresearch.org)).
214. Parkinson C, Nehme M, Horton J, Hara AT, Zero D. A modified in-situ model to evaluate the anti-erosion properties of a fluoride dentifrice. *Caries Res* 50: Abst. 150, 2016. <https://www.karger.com/Article/Abstract/445087>
215. Al-Hashimi I, Papas A, Alevizos I, Brennan M, Navazesh M, Pinto A, Stewart C, Sweier D, Tanzer J, Vivino F, Shiboski C, Zero DT, Carsons SE, Hammitt KM. Sjögren's Syndrome Foundation. Clinical practice guidelines for mucosal management and treatment and use of secretagogues in Sjögren's. ISSS 2018
216. Al-Hashimi I, Papas A, Alevizos I, Brennan M, Navazesh M, Pinto A, Stewart C, Sweier D, Tanzer J, Vivino F, Shiboski C, Zero DT, Carsons SE, Hammitt KM. Sjögren's Syndrome Foundation. Sjögren's Syndrome Foundation Clinical Practice Guidelines for mucosal management and treatment and use of secretagogues in Sjögren's. *Clinical and Experimental Rheumatology Suppl* Abst. 162, 2018.
217. Creeth J, Hara AT, Lippert F, G Burnett, Gomez-Pereira PR, Souverain A, Zero DT. Novel sodium fluoride dentifrice effects on early enamel erosion in situ. *J Dent Res* (Spec Iss ): Abst. 1829, 2019. ([www.dentalresearch.org](http://www.dentalresearch.org)).

218. Zero DT, Lippert F, Hara AT, Eckert GJ. Fluoride dose-response of a modified in situ caries model. *J Dent Res (Spec Iss)* : Abst. 3436, 2019. ([www.dentalresearch.org](http://www.dentalresearch.org)).
219. Hara A, Bezerra S, Fried D, Lippert F, Eckert G, Ungar P, Zero D. Assessment of in situ simulated erosive tooth wear by CP-OCT. *J Dent Res (Spec Iss)* : Abst. 3241, 2020. ([www.dentalresearch.org](http://www.dentalresearch.org)).
220. Zero DT, Hara AT Lippert F, Arthur RA, Eckert GJ, Koo H, Sharma D, McDonough J, Fitzgerald L, Lynch M, Seo J, Fourre T. Novel In situ biofilm model for the study of plaque formation and caries. *J Dent Res (Spec Iss)* : Abst. 1810, 2021. ([www.dentalresearch.org](http://www.dentalresearch.org)).
221. Creeth J, Butler A, Patil A, Hara A, Zero D. Enamel erosive lesion remineralisation by fluoride toothpastes in-situ: network meta-analysis. *J Dent Res (Spec Iss)* : Abst. 2172, 2021. ([www.dentalresearch.org](http://www.dentalresearch.org)).
222. Gomez GF, Rajendran D, Patel J, Bandaru HM, Smith JC, Grannis SJ, Hugenberg ST, Zunt S, Zero DT, Thyvalikakath TP. Identifying Sjogren's Syndrome patients using matched electronic dental-health record data. *J Dent Res (Spec Iss)* : Abst. 2073, 2021. ([www.dentalresearch.org](http://www.dentalresearch.org)).
223. Gomez GF, Thyvalikakath TP, Rajendran D, Smith JC, Vilhauer A, Grannis SJ, Hugenberg ST, Zunt S, Zero DT. Diagnostic algorithm from prognostic markers and comorbidities in Sjogren's Syndrome patients. *J Dent Res (Spec Iss)* : Abst. 0737, 2022. ([www.dentalresearch.org](http://www.dentalresearch.org)).
224. Klukowska M, St. John S, Biesbrock A, Peters, J, Hara A, Zero D. Enamel remineralization rfficacy of SnF2 in an in situ remin model. *J Dent Res (Spec Iss)* : Abst. 0038, 2023. ([www.dentalresearch.org](http://www.dentalresearch.org)).
225. Huang Y, Liu Y, Kim D, Ren Z, Oh MJ, Cormode DP, Hara AT, Zero DT, Koo H. Ferumoxytol nanoparticles target biofilms causing tooth decay in the human mouth. *J Dent Res (Spec Iss)* : Abst. 0742, 2023. ([www.dentalresearch.org](http://www.dentalresearch.org)).