

Debby Hwang
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Education

- 2003-2006 Certificate & MS, Periodontology
University of Michigan School of Dentistry, Ann Arbor, Michigan
- 1999 – 2003 DMD, *cum laude*
Harvard School of Dental Medicine, Boston, Massachusetts
- 1996 – 1999 BS, *magna cum laude*, Cellular and Molecular Biology
University of Michigan, Ann Arbor, Michigan

Publications

- 2006 Hwang D, Wang HL. Gingival thickness as a predictor of root coverage: a systematic review. *J Periodontol*. Accepted May 2, 2006.
- 2006 Hwang D, Wang HL. Medical contraindications to implant therapy. *Implant Dent*. Accepted October 17, 2005.
- 2005 Hwang D, Popat R, Bragdon C, O'Donnell KE, Sonis ST. Effects of ceramide inhibition on experimental radiation-induced oral mucositis. *Oral Surg Oral Med Oral Pathol Oral Radiol Oral Endod*. 2005; 100:321-329.

Publications in preparation

- 2006 Hwang D, Michailidis G, Wang C-Y, Taichman RS, Giannobile WV. Molecular profiles of periodontal disease. *J Dent Res*
- 2006 Fotek P, Hwang D, Fotek I, Wang HL. Tooth mobility and its interpretations. *J Clin Perio*

Oral presentations

- 4/21/2006 Hwang D. Implant papilla. At the University of Michigan Alumni Day in Ann Arbor, MI.
- 4/15/2005 Hwang D, Giannobile WV, Taichman RT, Wang C-Y. Molecular profiles of periodontal disease. At the University of Michigan Alumni Day in Ann Arbor, MI.
- 6/15/2001 Uzel NG, Socransky SS, Hwang D, Lucey CA, Phelan S, Scherer JS, Sonis ST. Characteristics of oral bacterial colonization in radiation-induced mucositis. At Multinational Association of Supportive Care in Cancer 13th International Symposium in Copenhagen, Denmark.

Poster presentations

- 5/31/2003 Popat R, Sonis ST, Hwang D, & O'Donnell KE. Inhibition of ceramide synthase, but not sphingomyelinase, attenuates radiation-induced mucositis in hamsters. At 39th Annual Meeting of the American Society of Clinical Oncology, Chicago, Illinois, USA.
- 4/17/2003 Hwang D, Sonis ST, Popat R, O'Donnell KE, Lucey CA, Scherer JS, Phelan S. Effects of ceramide inhibition on radiation-induced oral mucositis in an animal model. At Harvard School of Dental Medicine Research Day, Boston, Massachusetts, USA.

Abstracts

- 6/2001 Socransky SS, Scherer JS, Phelan S, Hwang D, Uzel G, Sonis ST. Characteristics of

oral bacterial colonization in experimental radiation-induced mucositis. Support Care Cancer 9 (4): 301.

Research in progress

2003 – present Molecular profiles of periodontal disease. Laboratory of Dr. William V. Giannobile. Department of Periodontology, University of Michigan School of Dentistry, Ann Arbor, Michigan. Designed aims and protocol, collected samples, ran laboratory experiments and performed statistical analysis for microarray study regarding gene expression differences between healthy and chronic or aggressive periodontal disease.

Past research

2000 – 2003 Role of glutathione, an inhibitor of neutral sphingomyelinase, on the development of oral mucositis in a hamster model. Laboratory of Dr. Stephen T. Sonis. Division of Oral Medicine, Oral and Maxillofacial Surgery and Dentistry, Brigham and Women's Hospital, Boston, Massachusetts. Created and designed research project and protocol. Performed all initial trials of investigation.

2000 – 2003 Histological features of rat gastrointestinal tissue in response to ionizing radiation. Laboratory of Dr. Stephen T. Sonis. Division of Oral Medicine, Oral and Maxillofacial Surgery and Dentistry, Brigham and Women's Hospital, Boston, Massachusetts. Determined apoptotic marker to use in investigation. Performed immunohistological sample preparation, staining and analyses.

5/1998 – 7/1998 mRNA analysis of phosphophoryn protein involved in tooth remineralization. Laboratory of Dr. Brian H. Clarkson. Department of Cariology, Restorative Sciences and Endodontics, University of Michigan School of Dentistry, Ann Arbor, Michigan. Collected and analyzed mRNA from extracted teeth.

1997 – 1999 Novel methods of legume growth to promote isoflavonoid concentrations. Laboratory of Peter B. Kaufman. Department of Biology, University of Michigan, Ann Arbor, Michigan. Contract developed with Hauser, Inc. Formulated methods of growing legumes with molds and metabolites to enhance isoflavonoids. Trained and mentored two lab members involved in the project.

Professional experience

2006 Surgical instructor in human cadaver course, University of Michigan School of Dentistry. Guide dentists in performing sinus elevations and advanced ridge augmentation.

2006 Surgical instructor in pig jaw course, University of Michigan School of Dentistry. Teach first-year periodontal and Advanced Education in General Dentistry residents.

2005 – 2006 Clinical instructor in Clinical Foundations 530, University of Michigan School of Dentistry. Educate second-year dental students in non-surgical periodontal therapy.

2004 – present Undergraduate clinic instructor, University of Michigan School of Dentistry. Teach and evaluate dental students involved in patient care.

5/1999 – 8/1999 Summer Program Research Intern. Developed new processes to increase load and quality of DNA sequencing. Oral presentation given at end of internship. DNA Sequencing Core, Parke-Davis Pharmaceutical (now Pfizer Pharmaceuticals, Inc.), Ann Arbor, Michigan.

Professional accolades

2003 American Academy of Periodontology Student Scholarship

Honors and awards

2004 – 2005 MITECH Plus, Inc. Endowed Scholarship
2004 – 2005 MidMichigan Medical Center – Midland Volunteers Scholarship

2003 – 2004	Lyle and Delbert Pevitt Memorial Scholarship
2003 – 2004	Ralph and Faye Prescott Memorial Scholarship
1998 – 1999	Dean's List
1997 – 1999	James B. Angell Scholar Award
1997	University of Michigan Sophomore Honors Award
1996 – 1999	National Merit Scholarship
1996	University of Michigan Regents-Alumni Scholarship
1996	Mahlen H. Moore Excellence in Science & Math Award
1996	Dow Chemical Company Outstanding Science Student of 1996
1996	American Chemical Society Science Olympiad Award
1996	Valedictorian, Midland High School, Midland, Michigan

Grants

2001	Harvard Medical School Office of Enrichment Research Grant, \$1000
2000	Harvard Medical School Office of Enrichment Research Grant, \$1000

Professional affiliations

2003 – present	American Academy of Periodontology, resident member
1999 – present	American Student Dental Association, student member
1999 – present	Phi Beta Kappa
1999 – present	Phi Kappa Phi
1995 – 1996	Golden Key National Honor Society, treasurer

Licenses

2006	IV sedation certification expected
2006	State of Connecticut dental license
2004 – present	State of Michigan dental license (NERB certified)
2004 – present	DEA certification
2004 – present	ACLS certification
2002 – present	BLS certification

Volunteer activities

2006	S.O.S. Community Center, Ypsilanti, MI. Food crisis counselor.
2005 – 2006	Food Bank of Eastern Michigan, Flint, MI. Salvage groceries from stores for distribution to partner organizations.
2001 – 2003	Bridge Over Troubled Waters, Boston, MA. Dental clinician for needy children. Examinations, prophies performed.
1997 – 1999	University of Michigan Medical Center, Ann Arbor, MI. Volunteer in pediatric oncology and trauma-burn units.
1998 – 1999	S.O.S. Community Center, Ypsilanti, MI. Distribute groceries directly to needy patrons per counselor recommendations.
1993 – 1996	Habitat for Humanity, Midland, MI. Builder. Participated in painting and carpentry of new and existent houses for impoverished families.
1993 – 1996	American Red Cross, Midland, MI. Safety Town camp leader.