

## CURRICULUM VITAE

**Nicholas F. Dybdal-Hargreaves DDS, PhD, Endodontist**  
**Diplomate of the American Board of Endodontics**

### PERSONAL

**Born:** [REDACTED]  
**Family:** Married  
**Address:** **Professional**  
7 to 7 Dental & Orthodontics  
14975 I-35 N #105 Selma, TX, 78154  
attn: Hargreaves Endodontics, PLLC  
**Phone:** [REDACTED]  
**E-mail:** [REDACTED]

### EDUCATION & TRAINING

**High School** Winston Churchill High School  
**2004-2008** San Antonio, Texas  
Eagle Scout

**BS** Trinity University  
**2008-2012** San Antonio, Texas  
Major: Biochemistry and Molecular Biology  
Magna Cum Laude, GPA-3.73  
Dental Admission Test (DAT)- 22 (97<sup>th</sup> Percentile)

**DDS/PhD** Dual Degree COSTAR Training Program  
**2012-2019** Pharmacology Track  
PhD Mentor: Susan L. Mooberry, PhD  
University of Texas Health Science Center at San Antonio (UTHSCSA)  
San Antonio, Texas  
Graduate School GPA- 4.0  
Qualifying Exam Passed (June 3<sup>rd</sup>, 2014)  
Dissertation Proposal Approved (June 31<sup>st</sup>, 2015)  
Dissertation Defense (Jan. 16<sup>th</sup>, 2019)  
Dental School GPA- 3.855  
Passed National Board Dental Examinations (NBDE) Part I- Summer 2017  
Passed National Board Dental Examinations (NBDE) Part II- Summer 2018  
Passed Western Regional Examination Board (WREB) (May 2019)  
Texas Dental License Issued- #35211 (06/21/2019)

**Endodontics** Certificate in Endodontics  
**Residency** Department of Endodontics at UTHSCSA  
**2021-2023** San Antonio, Texas  
Board Certified Endodontist July 2025 (requires passing three exams: written, oral and a clinical case series with 12-month follow up examinations)  
Passed Written Boards- May 2023  
Passed Oral Boards- Oct. 2023  
Passed Cases Series Board- July 2025

## AWARDS and HONORS

- April 2005** First Place All Divisions, Texas Junior Academy of Science State Competition
- 2008-2012** Trinity Trustees' Scholarship, Trinity University
- 2011-2012** Mind Science Foundation (MSF) Grant Review Board (reviewed and ranked grant applications of undergraduate students for MSF funding), member and chairman, Trinity University
- May 2012** Outstanding Senior in Biochemistry and Molecular Biology, Trinity University
- May 2012** Phi Beta Kappa Honor Society
- 2013-2019** Institutional National Research Service Award (T32 grant, DE14318), UTHSCSA
- Oct. 2014** Winner of the Outstanding Poster Award at the 21st Annual Graduate Student Symposium (1 of 2 winners in a poster competition judged by faculty out of 30 posters), UTHSCSA
- 2013-2015** INTD 5000 Course Review Committee (reviewed first semester curriculum for incoming graduate students), member
- 2013-2014** Graduate Student Symposium Committee (organize and implement annual symposium for UTHSCSA pharmacology and neuroscience graduate students), member
- April 2015** Winner of the Post-Doctoral Division Poster Award at the 33<sup>rd</sup> Annual School of Dentistry's Dental Science Symposium, UTHSCSA
- June 2015** NIDCR F30 4-year Fellowship Award
- March 2016** 2<sup>nd</sup> Place Winner of the Post-Doctoral Division Poster Award at the 34<sup>th</sup> Annual School of Dentistry's Dental Science Symposium, UTHSCSA
- May 2016** Frank Dehotes Oral and Maxillofacial Surgery Travel Award based on research presented at the 34<sup>th</sup> Annual School of Dentistry's Dental Science Symposium, UTHSCSA
- March 2017** 1<sup>st</sup> Place Winner of the Post-Doctoral Division Poster Award at the 35<sup>th</sup> Annual School of Dentistry's Dental Science Symposium, UTHSCSA
- Feb. 2019** 2<sup>nd</sup> Place Winner of the Post-Doctoral Division Poster Award at the 37<sup>th</sup> Annual School of Dentistry's Dental Science Symposium, UTHSCSA
- May 2019** Student Achievement Award in Endodontics, Senior Dental Student Award Ceremony, UTHSCSA
- May 2019** Outstanding Achievement in Periodontics, Senior Dental Student Award Ceremony, UTHSCSA
- May 2019** Maria Yeung Student Research Award, Senior Dental Student Award Ceremony, UTHSCSA
- Nov. 2022** Foundation for Endodontics Competitive Research Grant Award
- Jan 2023** Resident Member of the Dental School Research Committee
- March 2023** 1<sup>st</sup> Place Winner of the Post-Doctoral Division Poster Award at the 41<sup>st</sup> Annual School of Dentistry's Dental Science Symposium, UTHSCSA
- Oct. 2025** San Antonio Magazine Top Dentist Award (nominated by peer dentists as a top provider in San Antonio)

## ORAL PRESENTATIONS

1. "Structural Studies of Insulin-Cucurbit[7]uril Interactions" Trinity Summer Research Symposium, Trinity University; San Antonio, Texas; August 2009
2. "Microtubule Targeting Agents." Pharm-SURF Summer Research Symposium, UTHSCSA; San Antonio, Texas; July 2011
3. "Novel Mechanisms of Microtubule Targeting Agents." Pharmacology Department Summer Research Practicum, UTHSCSA; San Antonio, Texas; Aug. 7<sup>th</sup> 2013.

4. "Enhanced Inhibition of ERK Signaling by a Novel Allosteric MEK Inhibitor, CH5126766, That Suppresses Feedback Reactivation of RAF Activity." Pharmacology Journal Club UTHSCSA; San Antonio, TX; Nov. 5<sup>th</sup> 2013.
5. "Drugging MYCN through an Allosteric Transition in Aurora Kinase A." Pharmacology Journal Club UTHSCSA; San Antonio, TX; Feb. 3<sup>rd</sup> 2015.
6. "Novel Mechanisms of Microtubule Targeting Agents." Dissertation Proposal UTHSCSA; San Antonio, TX; June 30<sup>th</sup> 2015.
7. "Microtubule Targeting Agents Differentially Interrupt Scaffold Mediated Signaling." NIDCR COSTAR Site Visit; San Antonio, TX; June 2016.
8. "Thyroid Issues and Dentistry." Teaching Honors Seminar UTHSCSA; San Antonio, TX; Dec. 12<sup>th</sup> 2016
9. "Novel Mechanisms of Microtubule Targeting Agents." Dissertation Defense UTHSCSA; San Antonio, TX; Jan. 16<sup>th</sup> 2019.
10. "Treatment Planning as a Team." 7 to 7 Dental Study Club, 2 h CE Lecture. San Antonio, TX; Feb. 7<sup>th</sup> 2023.
11. "One-Year Success Rate of the GentleWave Irrigation Procedure Compared to Conventional Needle Irrigation Procedure for Non-Surgical Root Canal Treatment." American Association of Endodontists Annual Meeting. Resident Lecture Series. Chicago, IL; May 4<sup>th</sup> 2023.
12. "Urgent Care! Diagnosis, Management, Case Examples." 7 to 7 Dental Study Club, 2 h CE Lecture. San Antonio, TX; Aug. 2<sup>nd</sup> 2023.

## SOCIETY MEMBERSHIPS

2010-2011	American Chemical Society (ACS)
2012-2014	American Society for Cell Biology (ASCB)
2014-2016	American Association for Cancer Research (AACR)
2014-2019	American Association for Dental Research (AADR)
2014-2019	Dental Student Interest Group of American Academy for Periodontology (AAP)
2018-present	American Association of Endodontists (AAE)

## PUBLICATIONS

### Journal Articles:

1. Trevino EG, Patwardhan AN, Henry MA, Perry G, **Dybdal-Hargreaves N**, Hargreaves KM, Diogenes A. Effect of irrigants on the survival of human stem cells of the apical papilla in a platelet-rich plasma scaffold in human root tips. *J Endod.* 37: 1109-1115; 21763903, 2011
2. Chinai JM, Taylor AB, Ryno LM, **Hargreaves ND**, Morris CA, Hart PJ, Urbach AR. Molecular recognition of insulin by a synthetic receptor. *J Am Chem Soc.* 133: 8810-8813; PMC3110995, 2011
3. **Dybdal-Hargreaves NF**, Holder ND, Ottoson PE, Sweeney MD, Williams T. Mephedrone: public health risk, mechanisms of action, and behavioral effects. *Eur J Pharmacol.* 714: 32-40; 23764466, 2013, Review
4. Gangjee A, Zaware N, Vyas Devambatla RK, Raghavan S, Westbrook CD, **Dybdal-Hargreaves NF**, Hamel E, Mooberry SL. Synthesis of N4-(substituted phenyl)-N4-alkyl/ desalkyl-9Hpyrimido[4,5-b]indole-2,4-diamines and identification of new microtubule disrupting compounds that are effective against multidrug resistant cells. *Bioorg. Med. Chem.* 21: 891-902; PMC3572549, 2013
5. Zhang X, Raghavan S, Ihnat M, Thorpe JE, Disch BC, Bastian A, Bailey-Downs LC, **DybdalHargreaves NF**, Rohena CC, Hamel E, Mooberry SL, Gangjee A. The design and discovery of

water soluble 4-substituted-2,6-dimethylfuro[2,3-d]pyrimidines as multitargeted receptor tyrosine kinase inhibitors and microtubule targeting antitumor agents. *Bioorg Med Chem.* 22: 3753-3752; PMC4089508, 2014

6. **Dybdal-Hargreaves NF**, Risinger AL, Mooberry SL. Eribulin mesylate: mechanism of action of a unique microtubule targeting agent. *Clin. Cancer Res.* 21: 2445-2452; 25838395, 2015
7. Risinger AL\*, **Dybdal-Hargreaves NF\***, Mooberry SL. Breast cancer cell lines exhibit differential sensitivities to microtubule targeting drugs independent of doubling time. *Anticancer Res.* 35: 5845-5850, 2015
8. Dasari R, De Carvalho A, Medellin DC, Middleton KN, Hague F, Volmar MN, Frolova LV, Rossato MF, De La Chapa JJ, **Dybdal-Hargreaves NF**, Pillai A, Kälin RE, Mathieu V, Rogelj S, Gonzales CB, Calixto JB, Evidente A, Gautier M, Munirathinam G, Glass R, Burth P, Pelly SC, van Otterlo WA, Kiss R, Kornienko A. (2015) Synthesis and biological studies of sesquiterpene polygodial: activity of 9-epipolygodial against drug-resistant cancer cells. *Chem Med Chem.* 10: 2015
9. Dasari R, De Carvalho A, Medellin DC, Middleton KN, Hague F, Volmar MN, Frolova LV, Rossato MF, De La Chapa JJ, **Dybdal-Hargreaves NF**, Pillai A, Kälin RE, Mathieu V, Rogelj S, Gonzales CB, Calixto JB, Evidente A, Gautier M, Munirathinam G, Glass R, Burth P, Pelly SC, van Otterlo WA, Kiss R, Kornienko A. Wittig derivatization of sesquiterpenoid polygodial leads to cytostatic agents with activity against drug resistant cancer cells and capable of pyrrolylation of primary amines. *Eur J Med Chem.* 103: 226-237, 2015
10. Rohena CC, Risinger AL, Devambatla RK, **Dybdal-Hargreaves NF**, Kaul R, Choudhary S, Gangjee A, Mooberry SL. Janus compounds, 5-chloro-N4-methy-N4-aryl-9H-pyrimido[4,5b]indole-2,4-diamines, cause both microtubule depolymerizing and stabilizing effects. *Molecules.* 21: e1661, 2016
11. Gonzales CB, De La Chapa JJ, Saikumar P, Singha PK, **Dybdal-Hargreaves NF**, Chavez J, Horning AM, Parra J, Kirma NB. Co-targeting ALK and EGFR parallel signaling in oral squamous cell carcinoma. *Oral. Oncol.* 59: 12-19, 2016
12. **Dybdal-Hargreaves NF**, Risinger AL, Mooberry SL. Regulation of E-cadherin localization by microtubule targeting agents: rapid promotion of cortical E-cadherin through p130CAS/Src inhibition by eribulin *Oncotarget.* 9:5545-5561, 2018 **Priority (Feature) Article**
13. Pavana RK, Shah K, Gentile T, **Dybdal-Hargreaves NF**, Risinger AL, Mooberry SL, Hamel E, Gangjee A. Sterically induced conformational restriction: discovery and preclinical evaluation of novel pyrrolo[3,2-d]pyrimidines as microtubule targeting agents. *Bioorg Med Chem.* 26:54705478, 2018
14. Marinkovic M\*, **Dybdal-Hargreaves NF\***, Block TJ\*, Dean DD, Yeh CK, Chen XD. Oral and craniofacial stem cells: an untapped source for neural tissue regeneration. *Tissue Eng Part A.* doi: 10.1089/ten.TEA.2020.0023, epub ahead of print, 2020

#### Abstracts:

1. **Dybdal-Hargreaves NF**, Taylor AD, Hart JP, and Urbach AR. March 2010. American Chemical Society Biannual Meeting (ACS). San Francisco, CA. Crystal structure of an insulincucurbitu[7]uril complex. (Poster)

2. **Dybdal-Hargreaves NF** and Mooberry SL. May 3<sup>rd</sup> 2013. 5<sup>th</sup> Annual Terry M. Mikiten, Ph.D., Graduate Student Research Forum and Lecture. San Antonio, TX. The case for non-mitotic effects of microtubule targeting agents contributing to anticancer efficacy in the clinic. (Poster)
3. **Dybdal-Hargreaves NF** and Mooberry SL. April 10<sup>th</sup> 2013. 31<sup>st</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. The case for non-mitotic effects of microtubule targeting agents contributing to anticancer efficacy in the clinic. (Poster)
4. **Dybdal-Hargreaves NF** and Mooberry SL. Oct. 25<sup>th</sup> 2013. 20<sup>th</sup> Annual Graduate Student Symposium. San Antonio, TX. Microtubule Targeting Agents Disrupt BCAR1 Localization and BCAR1 Associated Signaling in Cancer Cells. (Poster)
5. **Dybdal-Hargreaves NF** and Mooberry SL. February 2014. Keystone Symposium: Cilia, Development and Human Disease. Lake Tahoe, CA. Differential effects of microtubule targeting agents on primary cilia in triple negative breast cancer cells. (Poster)
6. **Dybdal-Hargreaves NF** and Mooberry SL. March 2014. 32<sup>nd</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. Differential effects of microtubule targeting agents on primary cilia in triple negative breast cancer cells. (Poster)
7. **Dybdal-Hargreaves NF** and Mooberry SL. May 2014. 6<sup>th</sup> Annual Terry M. Mikiten, Ph.D., Graduate Student Research Forum and Lecture. San Antonio, TX. Differential effects of microtubule targeting agents on primary cilia in triple negative breast cancer cells. (Poster)
8. **Dybdal-Hargreaves NF** and Mooberry SL. October 2014. 21<sup>st</sup> Annual Graduate Student Symposium. San Antonio, TX. Differential sensitivity of oral squamous cell carcinoma cell lines to anticancer agents suggests molecular subtypes in the disease. (Poster, **Won Outstanding [Best] Poster Award**)
9. Risinger AL, **Dybdal-Hargreaves NF**, and Mooberry SL. December 2014. American Society for Cell Biology Annual Meeting (ASCB). Philadelphia, PA. Differential sensitivity of breast cancer cell lines to diverse microtubule targeting agents. (Poster)
10. **Dybdal-Hargreaves NF**, Rohena CC, Risinger AL, and Mooberry SL. March 14<sup>th</sup> 2015. NIDCR Trainee Symposium at the Annual Meeting of the American Associations for Dental Research (AADR). Boston, MA. OSCC lines represent multiple molecular subtypes with different drug sensitivities. (Poster)
11. **Dybdal-Hargreaves NF**, Rohena CC, Risinger AL, and Mooberry SL. March 2015. 33<sup>rd</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. Differential sensitivity of oral squamous cell carcinoma cell lines to anticancer agents suggests molecular subtypes in the disease. (Poster, **Winner of the Post-Doctoral Division Poster Award**)
12. **Dybdal-Hargreaves NF**, Risinger AL, and Mooberry SL. April 18<sup>th</sup> 2015. Annual Meeting of the American Association for Cancer Research (AACR). Philadelphia, PA. Microtubule targeting agents differentially disrupt scaffold proteins involved in the sensitivity of breast cancer cells to these agents. (Poster)
13. **Dybdal-Hargreaves NF**, Rohena CC, Risinger AL, and Mooberry SL. December 2015. Annual San Antonio Breast Cancer Symposium (SABCS). San Antonio, TX. Eribulin affects E-cadherin localization consistent with a reversal of the epithelial-to-mesenchymal transition. (Poster)

14. **Dybdal-Hargreaves NF**, Rohena CC, Risinger AL, and Mooberry SL. March 9<sup>th</sup> 2016. 34<sup>th</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. Eribulin affects E-cadherin localization consistent with a reversal of the epithelial-to-mesenchymal transition. (Poster, **Frank DeHotes Oral and Maxillofacial Surgery Travel Award and 2<sup>nd</sup> Place Winner of the Post-Doctoral Division Poster Award**)
15. **Dybdal-Hargreaves NF** Rohena CC, Risinger AL, and Mooberry SL. March 16<sup>th</sup> 2016; NIDCR Trainee Symposium at the Annual Meeting of the American Associations for Dental Research (AADR). Los Angeles, CA. Eribulin affects E-cadherin localization consistent with a reversal of the epithelial-to-mesenchymal transition. (Poster)
16. **Dybdal-Hargreaves NF** Rohena CC, Risinger AL, and Mooberry SL. October 28<sup>th</sup> 2016; 23<sup>rd</sup> Annual Graduate School Symposium. San Antonio TX. Eribulin affects E-cadherin localization consistent with a reversal of the epithelial-to-mesenchymal transition. (Poster)
17. **Dybdal-Hargreaves NF** and Mooberry SL. March 15<sup>th</sup> 2017. 35<sup>th</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. Effects of docetaxel on notch receptors in oral cancer cell lines. (Poster, **1<sup>st</sup> Place Winner of the Post-Doctoral Division Poster Award**)
18. **Dybdal-Hargreaves NF** and Mooberry SL. March 24<sup>th</sup> 2017. NIDCR Trainee Symposium at the Annual Meeting of the American Association for Dental Research (AADR). San Francisco CA. Effects of docetaxel on notch receptors in oral cancer cell lines. (Poster)
19. **Dybdal-Hargreaves NF** and Mooberry SL. March 14<sup>th</sup> 2018. 36<sup>th</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. Microtubule targeting agents disrupt notch signaling in oral cancer. (poster)
20. **Dybdal-Hargreaves NF** and Mooberry SL. February 20<sup>th</sup> 2019. 37<sup>th</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. Disruption of Notch in oral cancer by microtubule targeting agents. (poster, **2<sup>nd</sup> Place Winner of the Post-Doctoral Division Poster Award**)
21. **Dybdal-Hargreaves NF**, Hartley J, James Z. April 2022. American Association of Endodontists Annual Meeting. Phoenix, AZ. Cystic Decompression. (table clinic)
22. **Dybdal-Hargreaves NF** and Ruparel N. March 2023. 41<sup>st</sup> Annual UTHSCSA Dental Science Symposium. San Antonio, TX. One-Year Success Rate of the GentleWave Irrigation Procedure Compared to Conventional Needle Irrigation Procedure for Non-Surgical Root Canal Treatment. (poster, **1<sup>st</sup> Place Winner of the Post-Doctoral Division Poster Award**)
23. **Dybdal-Hargreaves NF** and Ruparel N. May 4<sup>th</sup> 2023. American Association of Endodontists Annual Meeting. Chicago, IL. One-Year Success Rate of the GentleWave Irrigation Procedure Compared to Conventional Needle Irrigation Procedure for Non-Surgical Root Canal Treatment. (oral)

**Critically Acclaimed Topics (UTHSCSA CATs):**

1. **Dybdal-Hargreaves NF** and Diogenes A. March 2017. Laser-Assisted Endodontic Debridement Does Not Improve Healing Compared to Conventional Endodontic Disinfection for Patients With Pulpal Necrosis and Apical Periodontitis.
2. **Dybdal-Hargreaves NF**, Harley J, and Diogenes A. December 2021. Root Canal Treatment Is a Predictable and Successful Option for Patients with Cracked Teeth.
3. Hartley J, **Dybdal-Hargreaves NF**, and Diogenes A. December 2021. Following Endodontic Microsurgery, It Is Unclear if Grafting Will Aid in Greater Reconstitution of the Cortical Plate.

## Clinical Experience

<b>2017-2019</b>	Completed two clinical electives: Pre-Prosthetic Surgery and Molar Endo. Invisalign certification, nitrous/minimal sedation certification completed.
<b>06/2019- 06/2021</b>	Associate dentist with 7-7 Dental and Orthodontics.
<b>12/2020-06/2021</b>	Opened and served as the managing dentist for a new 7-7 Dental clinic.
<b>07/2021- 06/2023</b>	Endodontics residency at UTHSCSA
<b>07/2022- 06/2023</b>	Moonlighting (8 h/wk) at a 7 to 7 Dental clinic limited to endodontics
<b>07/2023- Present</b>	Founded Hargreaves Endodontics PLLC and contracted with 7 to 7 Dental