

Curriculum Vitae

Elizabeth Erickson-DiRenzo, Ph.D., CCC-SLP

Email: edirenzo@stanford.edu

Cell: 219-671-0260

PROFESSIONAL POSITIONS

- 10/01/2014 – Assistant Professor – Medical Center Line, Division of Laryngology, Department of Otolaryngology – Head & Neck Surgery, Stanford University School of Medicine, Stanford, CA
- 09/01/2012 – Postdoctoral Trainee, Division of Otolaryngology – Head & Neck Surgery,
08/31/2014 Department of Surgery, University of Wisconsin School of Medicine and Public Health, Madison, WI
- 01/02/2009 – Speech-Language Pathologist, IU Health-Arnett Hospital, Lafayette, IN
07/31/2012
- 08/20/2006 – Research Assistant, Laryngeal Research Laboratory, Purdue University, IN
08/07/2012
- 08/20/2006 – Laboratory Manager, Laryngeal Research Laboratory, Purdue University, IN
08/07/2012

EDUCATION

- 08/2012 Ph.D., Speech-Language Pathology (Voice Physiology), Purdue University, IN
Dissertation: Investigating the effects of a short duration pollutant challenge on vocal fold function
Advisor: M. Preeti Sivasankar, Ph.D.
- 12/2008 M.S., Speech-Language Pathology, Purdue University, IN
Thesis: Phonatory effects of inhaled corticosteroids in individuals with asthma
Advisor: M. Preeti Sivasankar, Ph.D.
- 05/2006 B.S. with Honors, Speech, Language, and Hearing Sciences, Purdue University, IN

AWARDS AND HONORS

- 2016- National Institutes of Health Extramural Loan Repayment Program Award for Clinical Research for “Clinical study of the effectiveness of DBS for essential vocal tremor”
- 2015 Travel Grant, The Fall Voice Conference Abstract Competition for “Preliminary study of the feasibility of intraoperative monitoring of essential vocal tremor during deep brain stimulation surgery”
- 2013-2015 National Institutes of Health Extramural Loan Repayment Program Award for Clinical Research for “Creation and characterization of an immortalized human vocal fold epithelial cell line”
- 2012-2014 National Institutes of Health Postdoctoral Training Grant (T32 DC 009401), Voice Research Training Program, University of Wisconsin, Madison, WI

- 2012 Meritorious Poster Submission, American-Speech-Language-Hearing Association Convention Poster Competition for “Elucidating the effects of a pollutant on vocal fold function”
- 2012 Third Place Award, American Laryngological Society Meeting Poster Competition for “Empirical support for humidification in the treatment of vocal deterioration secondary to vocal fold dehydration”
- 2011-2012 National Institutes of Health Predoctoral Training Grant (T32 DC 012773), Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, IN
- 2010 New Century Scholars Doctoral Scholarship, American Speech-Language-Hearing Foundation
- 2010 Alumni and Friends Award, Speech, Language, and Hearing Sciences, Purdue University
- 2010 Wilson Travel Scholarship, Speech, Language, and Hearing Sciences, Purdue University
- 2009 Student Research Travel Award, American Speech-Language-Hearing Association
- 2008 Travel Grant, Purdue Graduate Student Government
- 2008 Frederick N. Andrews Fellowship, Purdue Graduate School
- 2008 Outstanding Student Clinician, Indiana Speech-Language-Hearing Association
- 2007 Outstanding Student Clinician, Indiana Lion’s Club
- 2002-2006 Undergraduate Honors
Dean’s List: 5 semesters
Phi Kappa Phi and Golden Key Honor Societies

PEER REVIEWED PUBLICATIONS

Previously published under Erickson Levandoski

1. Ravikumar, V.K., Ho, A.L., Parker, J.J., **Erickson-DiRenzo, E.**, & Halpern, C.H. (2016) Vocal tremor: Novel therapeutic target for deep brain stimulation. *Brain Sciences*, 6(4): E48. PMID: 27735866.
2. **Erickson-DiRenzo, E.**, Eno, G., & Thibeault, S.L. (2016). Early cellular response to radiation in human vocal fold fibroblasts. *Annals of Otology, Rhinology, & Laryngology*, 125(5): 425-432. PMID: 26553661
3. Zambricki EA, Bergeron J, **Erickson-DiRenzo, E.**, Sung CK. (2016) Phonomicrosurgery simulation: A low cost teaching model using easily accessible materials. *The Laryngoscope*. PMID: 27107403
4. Ho, A.L.*, **Erickson-DiRenzo, E.***, Pendharkar, A.V., Sung, C.K., & Halpern, C.H. (2015). Deep brain stimulation for vocal tremor: A comprehensive, multidisciplinary methodology. *Neurosurgical Focus*, 38(6). **Denotes co-first authors** PMID: 26030706
5. **Erickson-DiRenzo, E.**, Sivasankar, M.P., & Thibeault, S.L. (2015). Utility of cell viability assays for used with excised vocal fold tissue. *The Laryngoscope*, 125(5), e180-185. PMID: 25511412

6. Ho, A. L., Choudhri, O., Sung, C. K., **DiRenzo, E. E.**, Halpern, C. H. (2015). Deep brain stimulation for essential vocal tremor: A technical report. *Cureus*, 7(3). PMID: 26180680
7. Sundarajan, A., **Erickson Levendoski, E.**, & Sivasankar, M.P. (2015). Influence of investigator awareness of experimental hypothesis on Phonation Threshold Pressure analysis. *Journal of Voice*, 29(1), 22-25. PMID: 25484262
8. **Erickson Levendoski, E.**, Ledyon, C., & Thibeault, S.T. (2014). Vocal fold epithelial barrier in health and injury: A research review. *Journal of Speech, Language, and Hearing Research*, 57(5), 1679-1691. PMID: 24686981
9. **Erickson Levendoski, E.**, & Sivasankar, M.P. (2014). Ion transport and mucin gene expression with acrolein exposure in porcine vocal folds. *Journal of Membrane Biology*, 247(5), 441-450. PMID: 24648011
10. **Erickson Levendoski, E.**, Sundarajan, A., & Sivasankar, M.P. (2014). Reducing the negative vocal effects of superficial laryngeal dehydration with humidification. *Annals of Otolaryngology & Rhinology*, 123(7), 475-481. PMID: 24690983
11. Sivasankar, M.P., **Erickson Levendoski, E.** (2012). Influence of obligatory mouth breathing, during realistic activities, on voice measures. *Journal of Voice*, 26(6), e9-13. PMID: 22921296
12. **Erickson Levendoski, E.** & Sivasankar, M.P. (2012). Role for ion transport in porcine vocal fold epithelial defense to acid challenge. *Otolaryngology- Head and Neck Surgery*, 146(2), 272-278. PMID: 22086905
13. Alper, R., Fu, S., **Erickson Levendoski, E.**, Zheng, W., & Sivasankar, M. (2011). Acute challenge to excised vocal fold epithelium via reactive oxygen species. *The Laryngoscope*, 121(10), 2180-2184. PMID: 21898441
14. **Erickson Levendoski, E.** & Sivasankar, M. (2011). Investigating the effects of caffeine on phonation. *The Journal of Voice*, 25(5), e215-e219. PMID: 21704493
15. **Erickson, E.** & Sivasankar, M. (2010). Evidence for adverse phonatory change following an inhaled combination treatment. *Journal of Speech, Language, and Hearing Research*, 53(1), 75-83. PMID: 20096227
16. **Erickson, E.** & Sivasankar, M. (2010). Simulated reflux decreases vocal fold epithelial barrier resistance. *The Laryngoscope*, 120(8), 1569-1575. PMID: 20096227
17. Sivasankar, M., **Erickson, E.**, Rosenblatt, M., & Branski, R. (2010). Hypertonic challenge to porcine vocal folds: Effects on epithelial barrier function. *Otolaryngology- Head and Neck Surgery*, 142(1), 79-84. PMID: 20096227
18. Sivasankar, M. & **Erickson, E.** (2009). Short duration accelerated breathing challenges affect phonation. *The Laryngoscope*, 119(8), 1658-1663. PMID: 19522007
19. Sivasankar, M., **Erickson, E.**, Schneider, S. & Hawes, A. (2008). Phonatory effects of oral breathing: Preliminary evidence for impaired compensation to airway dehydration in individuals with vocal fatigue. *Journal of Speech, Language, and Hearing Research*, 51(6), 1494-1506. PMID: 18664688

INVITED PUBLICATIONS

1. **Erickson-DiRenzo, E.** (2016). Barrier function of the laryngeal mucosa. *Perspectives on Voice and Voice Disorders*, 1(2), 52-62.

2. Leydon, C. & **Erickson Levendoski, E.** (2014). Vocal fold hydration: The quest to support clinical practice with evidence based research. *The Voice: Member Newsletter for the Voice Foundation*. 1(2), 6-7.
3. **Erickson Levendoski, E.** & Sivasankar, M. (2011). The laryngeal epithelium in reflux. *Perspectives on Voice and Voice Disorders*, 21(3), 112-117.

BOOK CHAPTERS

1. **Erickson-DiRenzo, E.** & DiRenzo, D. (to appear). Composition of the Body: Cells, Tissues, Organs. In R. Branski & B. Rousseau (Eds.), *Anatomy and Physiology of Speech and Hearing*. New York, NY: Thieme Publishers.
2. **Erickson-DiRenzo, E.** & Thibeault, S.L. (2015). Genetics and Voice. In R.T. Sataloff (Ed.), *Sataloff's Comprehensive Textbook of Otolaryngology*. Philadelphia, PA: Jaypee Brothers Medical Publishers.

NATIONAL AND INTERNATIONAL PRESENTATIONS

Erickson-DiRenzo, E. & Kearney, A. (2016) E-cigarettes: What do we know? Presented at the Annual Convention of the American Speech-Language-Hearing Association, Philadelphia, PA.

Erickson-DiRenzo, E. (2016) Laryngeal mucus: The good, the bad, the sticky. Presented at the 14th Biennial Phonosurgery Symposium, Madison, WI. ****Invited Session****

Erickson-DiRenzo, E., Tanner, K., & Thibeault, S. (2015) Busted, plausible or confirmed: Science behind our voice care recommendations. Presented at the Annual Convention of the American Speech-Language-Hearing Association, Denver, CO. ****Invited Session****

Erickson-DiRenzo, E., Sung, K.C., & Halpern, C.H. (2015) Preliminary study of the feasibility of intraoperative monitoring of essential vocal tremor during deep brain stimulation surgery. Presented at The Fall Voice Conference, Pittsburg, PA. ****Abstract Travel Award Recipient****

Chetri, D., Courey, M., Damrose, E. & **Erickson-DiRenzo, E.** (2015) Panel on Botulinum toxin injections: The good, the bad, and everything in-between. Presented at the National Spasmodic Dysphonia Association Symposium, San Francisco, CA. ****Invited Speaker****

Erickson-DiRenzo, E., Enos, G., Thibeault, S.L. (2015) Early cellular responses to ionizing radiation in human vocal fold fibroblasts. Presented at the American Broncho-Esophagological Society Meeting at the Annual Combined Otolaryngological Society Meeting, Boston, MA.

Erickson Levendoski, E., Thibeault, S.L., & Sivasankar, M.P. (2014) Determining the utility of cell viability assays for use with excised vocal folds. Poster presented at the American Broncho-Esophagological Society Meeting at the Annual Combined Otolaryngological Society Meeting, Las Vegas, NV.

Erickson Levendoski, E., Leydon, C., & Thibeault, S. (2014) Novel isolation and characterization of primary porcine vocal fold epithelial cells. Presented at the 9th International conference on Voice Physiology and Biomechanics, Salt Lake City, UT.

Erickson Levendoski, E. & Sivasankar, M. (2012). Elucidating the effects of a pollutant on vocal fold function. Poster presented at the Annual Convention of the American Speech-Language-Hearing Association, Atlanta, GA. ** Meritorious Poster Submission**

Erickson Levendoski, E. & Sivasankar, M. (2012). Functional changes in porcine vocal folds induced by a short duration pollutant challenge. Presented at the 8th International Conference on Voice Physiology and Biomechanics, Erlangen, Germany.

Erickson Levendoski, E. & Sivasankar, M. (2012). Empirical support for humidification in the treatment of vocal deterioration secondary to vocal fold dehydration. Poster presented at the American Laryngological Society Meeting at the Annual Combined Otolaryngological Society Meeting, San Diego, CA. **Third Place Award- ALA Poster Competition**

Van Deusen, M., Kojima, T., Denton, J., Sivasankar, M., **Erickson Levendoski, E.**, Wu, H., & Rousseau, B. (2012). Transepithelial resistance in the rabbit vocal fold. Poster presented at the American Broncho-Esophagological Society Meeting at the Annual Combined Otolaryngological Society Meeting, San Diego, CA. **First Place Award- ABEA Poster Competition**

Erickson Levendoski, E. & Sivasankar, M. (2011). Voice measures in smokers and nonsmokers at low humidity. Poster presented at the Annual Convention of the American Speech-Language-Hearing Association, San Diego, CA.

Sivasankar, M., **Erickson Levendoski, E.**, & Branski, R. (2011). Hypertonic challenge to porcine vocal folds: Effects on epithelial barrier function. Presented at the UCSF Fall Voice Conference, San Francisco, CA.

Erickson Levendoski, E. & Sivasankar, M. (2011). The potential role of transepithelial ion transport in vocal fold epithelial defense to gastric contents. Presented at the 40th Annual Symposium of the Voice Foundation, Philadelphia, PA. **Featured Basic Science Presentation**

Alper, R., Fu, S. **Erickson Levendoski, E.**, Zheng, W., & Sivasankar, M. (2011). Acute stress to excised vocal fold epithelium from reactive oxygen species. Poster presented at the American Laryngological Society Meeting at the Annual Combined Otolaryngological Society Meeting, Chicago, IL.

Erickson Levendoski, E. & Sivasankar, M. (2010). A systematic investigation of the effects of caffeine on voice production: A pilot study. Presented at the American Academy of Otolaryngology-Head and Neck Surgery, Boston, MA.

Erickson, E. & Sivasankar, M. (2010). Simulated reflux decreased vocal fold epithelial barrier resistance. Presented at the American Laryngological Society Meeting at the Annual Combined Otolaryngological Society Meeting, Las Vegas, NV.

Erickson, E. & Sivasankar, M. (2009). Evidence for adverse phonatory change following an inhaled combination treatment. Presented at the Annual Convention of the American Speech-Language-Hearing Association, New Orleans, LA.

Erickson, E. & Sivasankar, M. (2008). Short term accelerated breathing challenge affect phonation. Presented at the Annual Convention of the American Speech-Language-Hearing Association, Chicago, IL.

Erickson, E. & Sivasankar, M. (2008). Phonatory effects of inhaled corticosteroids in individuals with asthma. Poster presented at the International Symposium on Audible Acoustics in Medicine and Physiology, West Lafayette, IN.

Erickson, E. & Sivasankar, M. (2008). Phonatory effects in inhaled corticosteroids in individuals with asthma. Presented at the 37th Annual Symposium of the Voice Foundation, Philadelphia, PA.

Sivasankar, M & **Erickson, E. (2008).** Detrimental vocal effects of airway dehydration in males. Presented at the 37th Annual Symposium of the Voice Foundation, Philadelphia, PA.

Sivasankar, M. & **Erickson, E. (2008).** Temporal effects of dehydration challenge on phonation. Presented at the Annual Convention of the American Broncho-Esophagological Association, Combined Otolaryngological Spring Meeting, Orlando, FL.

Sivasankar, M., Hawes, A., Schneider, S., & **Erickson, E. (2007).** Phonatory compensation to dehydration challenge in individuals with vocal attrition. Presented at the Annual Convention of the American Speech-Language-Hearing Association, Boston, MA.

Sivasankar, M., Hawes, A., Schneider, S., & **Erickson, E. (2007).** Effects of oral and nasal breathing challenges in individuals with voice problems. Presented at the 36th Annual Symposium of the Voice Foundation, Philadelphia, PA.

LOCAL AND REGIONAL PRESENTATIONS

Erickson-DiRenzo, E. (2016). Vocal rehabilitation: Special considerations for the performer. Presented at the Pacific Voice Conference, San Francisco, CA.

Erickson Levendoski, E., Leydon, C., Thibeault, S.L. (2014). Novel isolation and characterization of primary porcine vocal fold epithelial cells. Poster presented at the 6th Annual Research Summit of the Department of Surgery, University of Wisconsin, Madison, WI.

Erickson Levendoski, E. & Leydon, C. (2013). Using transepithelial resistance to investigate vocal fold epithelial barrier function. Presented at the Research in Progress Seminar of the Department of Surgery, University of Wisconsin, Madison, WI.

Erickson Levendoski, E. (2013). Elucidating the effects of a pollutant on vocal fold function. Poster presented at the 5th Annual Research Summit of the Department of Surgery, University of Wisconsin, Madison, WI.

Erickson Levendoski, E. (2012). Investigating the acute effect of a pollutant on mechanisms critical for maintenance of laryngeal mucus. Presented at the Resident Research Conference of the Department of Otolaryngology and Communication Sciences, Medical College of Wisconsin, Milwaukee, WI .

Erickson Levendoski, E. & Sivasankar, M.P. (2011). The potential role of transepithelial ion transport in vocal fold epithelial defense to gastric contents. Presented at the Brown Bag Research Seminar, Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, IN.

Erickson, E. & Sivasankar, M.P. (2010). Simulated reflux increases vocal fold epithelial barrier resistance. Presented at the Brown Bag Research Seminar, Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, IN.

Erickson, E. & Sivasankar, M.P. (2008). Phonatory effects of inhaled corticosteroids in individuals with asthma. Presented at the 1st Annual Ringel Research Symposium, Department of Speech, Language, and Hearing Sciences, Purdue University, West Lafayette, IN.

RESEARCH GRANTS

Principal Investigator (New Investigators Research Grant, American Speech-Language-Hearing Foundation): ‘Clinical study of the effectiveness of DBS for vocal tremor’ (2015-2016).

Principal Investigator (Lions Club, Purdue University): ‘Phonatory effects of inhaled corticosteroids in individuals with asthma’ (2007-2008).

TEACHING

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| 2016 | Music 60, Singing: Instructor, Stanford University |
| 2016 | Faculty, Fiberoptic Endoscopic Evaluation of Swallowing (FEES) Acute Care Course (4/22/16-4/23/16): Stanford Health Care |
| 2016 | Faculty, Stanford TEP Course (3/11/16-3/12/16): Department of Otolaryngology – Head & Neck Surgery, Stanford University School of Medicine |
| 2015-Present | Clinical Supervisor and Educator, Speech-Language Pathology Graduate Student Externships, Stanford Voice and Swallowing Center |
| 2015 | Mentor, Stanford Center for Clinical and Translational Research and Education Intensive Course in Clinical Research |
| 2015 | Faculty, Stanford Advanced Swallowing Course (1/30/15-1/31/15): Department of Otolaryngology - Head & Neck Surgery, Stanford University School of Medicine |
| 2014-Present | Lecturer, Resident and Medical Student Education: Department of Otolaryngology – Head & Neck Surgery, Stanford University School of Medicine |
| 2013 | Undergraduate Research Mentor (Biology 152): University of Wisconsin - Madison |
| 2008-2011 | Anatomy and Physiology of the Speech and Hearing Mechanism (SLHS 304): Directed Teaching of Laryngeal Anatomy and Physiology Section, Purdue University |
| 2009-2011 | Introduction to Communicative Disorders (SLHS 115): Guest Lecturer, Purdue University |
| 2009-2010 | Speech-Language Disorders in the Health Care Setting (SLHS 430): Guest Lecturer, Purdue University |
| 2008-2010 | Voice Disorders (SLHS 532): Guest Lecturer, Purdue University |
| 2009-2010 | Fundamentals of Speech Production and Perception (SLHS 502): Guest Lecturer, Purdue University |

ACADEMIC AND COMMUNITY SERVICE

Academic

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| 2017- | Editorial Board Member: American Journal of Speech-Language Pathology |
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- 2016-Present Editorial Review Committee: Special Interest Group 3 (Voice and Voice Disorders), American Speech-Language-Hearing Association
- 2016 Reviewer: ASHA's Students Preparing for Academic Research Careers (SPARC) Award
- 2015 Conference Program Committee: The Fall Voice Conference
- 2011, 2014-2016d Conference Program Committee: Voice, Resonance, and Alaryngeal Speech, American Speech-Language-Hearing Association
- 2011-2012 Student Faculty Meeting Representative
- 2010 Special Interest Group 3 Representative: National Student Speech Language Hearing Association Knowledge Bowl at the ASHA Convention
- 2010-Present Journal Reviewer
 Cells Tissues Organ
 Journal of Speech, Language, and Hearing Research
 Journal of Communication Disorders
 American Journal of Speech-Language Pathology
 Laryngoscope
 Journal of Voice
 Otolaryngology – Head and Neck Surgery

Community

- 2015 Co-Presenter for Deep Brain Stimulation for Essential Tremor and Vocal Tremor” lecture. Sponsored by Stanford Health Library, Stanford, CA.
- 2015 Co-Presenter for “Anatomy of an Opera Singer” lecture. Sponsored by Center for Biomedical Ethics, Stanford Live, Stanford Medicine & the Muse Program in Medical Humanities & the Arts, Stanford, CA.
- 2015 National Spasmodic Dysphonia Support Group Speaker
- 2015 International Essential Tremor Foundation Support Group Speaker

PROFESSIONAL DEVELOPMENT

- 2016 American Speech-Language-Hearing Association Award for Continuing Education
- 2015 Stanford University School of Medicine Leading Teams Science Workshop
 Nominated and Selected Participant
- 2015-Present Stanford Department of Otolaryngology Teaching Course
- 2014 Stanford Center for Clinical and Translational Research and Education Intensive Course in Clinical Research
- 2013 American Speech-Language-Hearing Association's Lessons for Success Research Workshop
- 2013 Grant Writing and Professional Development, University of Wisconsin (CSD 900)
- 2011 Preparing Future Faculty, Purdue University (GRAD 590)
- 2009 Scientific Thinking and Grant Writing, Purdue University (SLHS 619)

CLINICAL CERTIFICATIONS

2014-Present California State Licensure in Speech-Language Pathology
2010-Present Certification of Clinical Competence in Speech-Language Pathology
2010-2012 Indiana State Licensure in Speech-Language Pathology
2010 Lessac-Madsen Resonant Voice Therapy
2007 Tracheoesophageal Puncture and Prosthesis- Postlaryngectomy Voice Restoration
2006-Present Rigid and Nasal Videostroboscopic Assessment

PROFESSIONAL MEMBERSHIPS

American Speech-Language-Hearing Association (ASHA)

ASHA Special Interest Group 3, Voice and Voice Disorders

ASHA Special Interest Group 13, Swallowing and Swallowing Disorders

ASHA Special Interest Group 19, Speech Science