

Mark A. Parker PhD, CCC-A, FAAA

CURRICULUM VITAE

DATE: October 20, 2023

ADDRESS: PO BOX 191, Greenbush, MA 02040

E-MAIL ADDRESS: doc@ParkerHS.org

EDUCATION

Graduate

1996- 2001 Ph.D., Neuroscience, Louisiana State University Health Sciences Center,
New Orleans, LA

1991-1995 M.S., Speech and Hearing Sciences, Portland State University,
Portland, OR

Undergraduate

1986-1991 B.A., Communicative Disorders, San Diego State University,
San Diego, CA

Postdoctoral Training

2001-2005 Research Fellow Department of Otology & Laryngology, Harvard Medical
School Children's Hospital, Laboratory of Cellular and Molecular Hearing
Research, Boston, MA

LICENSURE AND CERTIFICATION

2011-curr Commonwealth of Massachusetts Board of Professional Licensure as an
Audiologist (License # 974)

2011-curr American Speech Language Hearing Association (ASHA) Member

2011-curr American Academy of Audiology Fellow

PROFESSIONAL APPOINTMENTS

2023-curr Parker Hearing Services LLC- owner of this Concierge Audiology Practice

2022-curr Hearing University (HearU) Corporation- President of this 5013c educational non-profit

2011-curr Palm Springs Hearing Seminars- owner of this continuing educational seminar series

ACADEMIC APPOINTMENTS

2023-cur Assistant Professor Department of Otolaryngology, Head & Neck Surgery, Boston University
Chobanian & Avedisian School of Medicine

2011-2023 Assistant Professor Department of Otolaryngology, Head & Neck Surgery,
Tufts University School of Medicine

2006-2011 Research Associate, Massachusetts Eye and Ear Infirmary, Eaton
Peabody Laboratory, Toliston Laboratory of Cellular and Molecular
Hearing Research, Boston, MA

2007-2011 Lecturer Department of Otology & Laryngology, Harvard Medical School,
Boston, MA

2005-2011 Assistant Professor, Department of Communication Sciences and

Disorders, Emerson College, Boston, MA
2005-2006 Research Associate, Children's Hospital, Laboratory of Cellular and
Molecular Hearing Research, Boston, MA

HOSPITAL APPOINTMENTS

2011-2023 Director of Audiology, Department of Otolaryngology, Head & Neck
Surgery, Steward St. Elizabeth Medical Center, Boston, MA
2011-2023 Director Newborn Hearing Screening Program, Steward Medical Group,
Boston MA

HOSPITAL, MEDICAL SCHOOL, OR UNIVERSITY COMMITTEE ASSIGNMENTS:

Steward Medical Group (Steward Corporate Initiatives)

2015-2023 Director of Steward Audiology Initiative to integrate audiological services
throughout the Steward Hospital, Steward Physician, and Steward Health
Care Networks
2012-2023 Director of the Steward Newborn Hearing Screening Program. St.
Elizabeth's Medical Center, Holy Family Hospital, Good Samaritan
Medical Center, Norwood Hospital, Morton Hospital.

Hospital (Steward St. Elizabeth's Medical Center)

2011-2023 Director of Audiological and Vestibular Assessment, All-Ears Institute,
Department of Otolaryngology, Head & Neck Surgery, Steward St.
Elizabeth's Medical Center
2011-2023 Director of the Hearing Aid Center, Steward St Elizabeth's Medical Center
Departmental (Tufts University School of Medicine)
2015-2016 Dissertation Committee for Jonathan Whitton AuD, PhD Candidate in the
Health Sciences and Technology Department of Harvard Medical School.

Departmental (Communication Sciences & Disorders, Emerson College)

2009-2010 CD Hiring Committee, Chair
CD Undergraduate Program Assessment
CD Graduate Program Assessment
Fall and Spring Open House
Student Advising
2008-2009 CD Undergraduate Program Assessment
Health Communication Hiring Committee
Fall and Spring Open House
Student Advising
2007-2008 CD Undergraduate Program Assessment
Health Communication Hiring Committee
Fall and Spring Open House
Student Advising
2006-2005 Science Faculty Search Committee
Fall and Spring Open House

Student Advising
College Wide (Emerson College)
2009-2010 Faculty Advancement, Chair
Technical Policy
2008-2009 Academic Policy
2007-2008 Faculty Advancement
Academic Policy
Library
2006-2005 Library
Faculty Diversity Committee

OTHER SERVICE ACTIVITIES

2022 Reviewer for ASHA's Audiology/Hearing Science Travel Award (ARTA)
2021-curr Research Podiums and Student Research Forum Subcommittee
American Academy of Audiology
2019 The American Medical Association/Specialty Society RVS Update
Committee, Survey of Electrocochleography (EcochG) and Auditory
Evoked Potential (AEP) testing codes. American Academy of Audiology
Member Representative.
2019 The American Medical Association/Specialty Society RVS Update
Committee, Survey of Vestibular Evoked Myogenic Potential (VEMP)
Testing codes. American Academy of Audiology Member Representative.
2018-2019 Audiology Technician Training Program Task Force Member. The
American Academy of Audiology
2018 Subject Matter Expert (SME) for the American Academy of Audiology in
connection with the US Department of Labor Occupational Information
Network
2018 Regenerative Medicine Stakeholders Meeting Member. The Clinical and
Rehabilitative Medicine Research Program, US Army Medical Research
and Materiel Command.
2012-curr Journal Club Contributing Author. The Hearing Journal.
2010-curr Co-President and Director of Academic Programming. Palm Springs
Hearing Seminars.
2012-2014 Educational Grants Review Committee, The American Academy of
Audiology Foundation
2012 Task Force Member on the Changing Landscape of Healthcare. The
American Speech Language and Hearing Association.

TRAINING OF STUDENTS/POST DOCTORAL/FELLOWS

Otolaryngology/Rhinology Fellows (Tufts University School of Medicine)

2020-2021
Ahmet Tosun
Mohammad El Kilany
Diala Almardeeni

Emad Al Haj Ali
Omar Ramadan

2019-2020

Mohammad El Kilany
Emad Al Haj Ali
Mohanad-Amin Ramzown
Hussam Tallab
Diala Almardeeni

2018-2019

Hussam Tallab
Michael Schlewet
Adem Binnetoglu
Diala Almardeeni

2017-2018

Hussam Tallab
Michael Schlewet
Ghiath Al Nouri
Abhishek Ramadhin

2016-2017

Hussam Tallab
Michael Schlewet
Ghiath Al Nouri
Sterling Riggs
Naveen Kumar

2015-2016

Matthew Erickson
Kevin Hsu
Hussam Tallab

2014-2015

Mary Ashmead
Wendy McConnell
Turker Yilmaz

2013-2014

Usama Aboelkheir
Davis Carlson
Brendan Fennessy

2012-2013

Melinda Davis-Malesevich
Ziad Rohayem
Niranjan Sritharan

2011-2012

Rahul Gupta
Mier Warman
Rohan Wijewickrama

Doctoral Students (Clinical AuD)

- 2021 Kelley Stehura, Ohio University
Kate Bergin, University of Iowa
Christian Bourdon, Northwestern University
- 2020 Ying Y Hsiao, Rush University
Anna Demko, Salus University
Adele Elder, Pacific University
- 2019 Shuai Zhang, Northeastern University
- 2018 Bridget Kosilla, Vanderbilt University
Sara Schwartzler, Northwestern University
- 2017 Maeve Salanger, University of Maryland
- 2016 Stephane Maison, Northeastern University
- 2015 Gifty Easow, Indiana University
- 2014 Efoe Nytapee-Coo, Northwestern University
Stephen Deno, Northeastern University
- 2013 Cara Birner, Northeastern University
Ramia Narayanan, Northeastern University
Ella Raposo-Sacks, University of Massachusetts-Amherst
Dana Mario, Northeastern University
- 2012 Christine Marino, Northeastern University
- 2011 Bina Kim, Northeastern University

Masters Students (Research)

- 2009-2010 Kristen Jaunch, Emerson College
- 2009 Sherry Lin, Emerson College
- 2009 Kendra Marshall, Emerson College
- 2008 Amanda Rosenthal, Emerson College
- 2008 Jane Emes, Emerson College
- 2001-2007 Debora Corliss, Boston University

Undergraduate Students (Research)

- 2020-2021 Katherine Bart, Boston University
- 2017-2018 Lauren Marciano, Boston University
- 2013-2014 Josephine Ko, Boston University
- 2013 Bonnie Ong, Emerson College
- 2011 Rebecca Bieber, Emerson College
- 2010 Caitlin Simmons, Emerson College
- 2009 Michael Harris, Emerson College
- 2008 Sarah Blazic, Emerson College
- 2007 Sheeva Albhondra, Emerson College
- 2007 Ashley Galletta, Emerson College

TEACHING RESPONSIBILITY

2015-2023 Research in Hearing Science. Invited Lecturer, Otolaryngology/Rhinology
Fellows, Tufts New England Medical Center, Tufts University School of
Medicine

2011-2023 Audiological and Vestibular Assessment, Evaluation, and Rehabilitation
Primary Instructor, Otolaryngology/Rhinology Fellows, Steward St.
Elizabeth's Medical Center, Tufts University School of Medicine

2006-2011 Audiological Assessment and Rehabilitation. CD 687
Primary Instructor, Graduate students, Emerson College
4 credit hours/semester plus office hours

2005-2011 Principles and Procedures in Audiology CD 467
Primary Instructor, Undergraduate students, Emerson College
4 credit hours/semester plus office hours

2009 Anatomy & Physiology of the Speech and Hearing Mechanisms CD 237
Primary Instructor, Undergraduate students, Emerson College
4 credit hours/semester plus office hours

2005 Science and Society SC 280B
Primary Instructor, Undergraduate students, Emerson College
4 credit hours/semester plus office hours

PROFESSIONAL SOCIETIES

American Academy of Audiology
Association for Research in Otolaryngology
American Speech and Hearing Association

MAJOR RESEARCH INTERESTS

My overall program of research seeks to develop more effective treatments for hearing loss and deafness. My research is based on basic science and clinical applications of this science to better measure and treat human hearing loss.

I have two avenues of research by which I accomplish this overarching goal. The first avenue of research to develop better assessments of the underlying otopathologies that causes hearing loss. Much of this work aims to define the functional roles of inner hair cells, outer hair cells, and spiral ganglion neurons in discrimination of fine aspects of the speech stimuli. To test this, we apply advanced audiometric analysis to persons in our clinic with varying capabilities of speech discrimination in both quiet and complex listening situations. This information is important for rehabilitation, and also to identify the underlying otopathology for future biotechnological therapies.

The second interrelated body of work examines the ability of endogenous hair cell progenitors to differentiate into regenerated hair cells. This work aims to create a translational therapy where the pro-hair cell gene *Atoh1* can be conditionally expressed in specific supporting cell populations in the human cochlea. This work is focused on identifying supporting cell specific markers that can be used to drive *Atoh1* expression and engineering genetic constructs that allow for the spatial, temporal, and quantitative expression of *Atoh1*.

CLINICAL TRIALS

2013-2023 Investigation of Anatomical Correlates of Speech Discrimination.

ClinicalTrials.gov Identifier: NCT01781039 . Sponsor Steward St.

Elizabeth's Medical Center of Boston, Inc

Role: PI

2014-2017 Computer-Based Auditory Rehabilitation. ClinicalTrials.gov Identifier:

NCT02147847. Sponsor: Massachusetts Eye and Ear Infirmary

Role: co-PI at Steward Saint Elizabeth's Medical Center

RESEARCH SUPPORT

Completed Research Support

Research Grant Parker (PI)

NIDCD Small Grants Program (RO3) # R03DC010065. Submitted 7/08.

Awarded 4/09. Initiated 6/09. Duration 3 years.

Targeted expression of Atoh1 in cochlear supporting cells

This grant provides funds to investigate the ability of cochlear supporting cells to differentiate into hair cells by the conditional expression of the pro-hair cell gene Atoh1.

Role: PI

Award: \$300,000 over 3 years for research plus F&A and Subcontract Administration fees

Research Grant Parker (PI)

MEEI Initiative to Cure Sensorineural Hearing Loss 7/01/08-6/30/09

Gene expression in cochlear supporting cells

This grant provides for funds to generate an animal model in which to study the mechanism of hair cell regeneration

Role: PI

Award: \$133,000 over 2 years

Research Grant Parker (PI)

Hood Foundation New Investigator Award 7/01/06-6/30/08

Functional analysis of stem cells transplanted into the deafened cochlea

This grant provides for funds to generate several stably transfected stem cells lines that conditionally express Math1.

Role: PI

Award: \$150,000 over 2 years

Research Grant Parker (PI)

Huret Award 12/01/05-12/01/06

The effects of intracochlear injection of stem cell on auditory brainstem responses in mice.

This grant provides for funds to purchase and maintain guinea pigs to be used for the therapeutic application of stem cells in hearing loss.

Role: PI

Award: \$3,000

Research Grant Parker (PI)

Loan Repayment Program 12/01/05-12/01/06

Therapeutic effects of Stem Cells in the Cochlea

This grant provides for funds to repay educational debt accrued from the pursuit of the MS degree in Audiology.

Role: PI

Award: \$30,000

Research Grant Cotanche (PI) 9/01/05-8/31/06

Caroline Bass Fund

Genomics of Stem Cells in the Cochlea

This grant supports the research examining the gene and protein expression in stem cells before and after they are transplanted into the guinea pig cochlea.

Role: Key personnel (Post-doctoral Fellow)

Award: \$100,000

Research Grant Cotanche (PI) 9/01/05-8/31/06

Patterson Trust Fund

Functional Analysis of Stem Cell Transplantation in the Mammalian Cochlea

The long term objective of this project is to develop stem cells as a therapeutic tool for repairing the damaged mammalian cochlea.

Role: Key personnel (Post-doctoral Fellow)

Award: \$100,000

Research Grant Parker (PI) 1/01/03-8/31/05

NIH/NIDCD Kirschstein National Research Service Awards for Individual

Postdoctoral Fellows (F32). 5F32DC005866

Therapeutic Effects of Stem Cells on Hearing Loss

The experiments outlined in this postdoctoral fellowship proposal are focused on developing stem cells that can be transplanted into damaged cochleae. Our goal is to develop stem cell lines for transplanting hair cell precursors into mammalian cochleas where the normal population of hair cells is missing.

Role: PI

Award: \$50,000/year for 3 years

Research Grant Cotanche and Kelley (Co-PIs)

3/15/01-3/14/04

National Organization for Hearing Research Foundation Hair Cell Regeneration Initiative

Development of Stem Cell Populations for Utilization in Cochlear Transplantation

This was a collaborative fund between Children's Hospital Boston and Matthew Kelley's lab at NIDCD whose long term objective was to develop stem cells as a therapeutic tool for repairing the damaged mammalian cochlea.

Role: Research Fellow

Award: \$25,000

EDITORIAL BOARDS AND ACTIVITY

Invited Peer-Reviewer

BMC Neuroscience

Current Molecular Pharmacology

Ear and Hearing

Experimental Neurology

Frontiers in Neuroscience

Hearing Research

Journal of the American Medical Association Otolaryngology-Head & Neck

Surgery

Journal for the Association of Research in Otolaryngology

Journal of Biological Chemistry

Journal of Neuroscience Research

Molecular Brain Research

National Institutes of Mental Health (NIMH) panel for stem cell related research relevant to research on the heterogeneity of Autism Spectrum Disorder (ASD).

Ad Hoc reviewer

PLoS ONE

Scientific Reports (Nature)

Stem Cell

Stem Cell Research & Therapy

AWARDS

2011 AHSAs Editor's Award: for the article of highest merit in the field of Audiology

2006 Huret Award for New Investigators

2000 Greater Society of Neuroscience: Best Student Lecture

PATENTS

2013 Filing Date, November 4, 2013 COMPOSITIONS AND METHODS FOR AUDITORY THERAPY. Mark A Parker, Inventor. U.S. Patent Application No.: 14/070,763; International Patent Application No.: PCT/US2013/068212.

CONSULTING

2023 Subject Expert for an Over-the-Counter Hearing Aid manufacturer

2021-2022 Subject Expert for a Pharmaceutical company: clinical analysis of tinnitus side effects in internal clinical trial data

2021-curr Technical Advisory Board Member for Lucid Hearing

2021 Subject Expert for a Venture Capital Group: clinical analysis of raw unpublished clinical trial data on hair cell regeneration

2021 Subject Expert for a Venture Capital Group A: clinical analysis of public clinical trial data on hair cell regeneration

- 2021 Subject Expert for a Venture Capital Group B: clinical analysis of public clinical trial data on hair cell regeneration
- 2021 Subject Expert for a Venture Capital Group C: clinical analysis of public clinical trial data on hair cell regeneration
- 2021 Subject Expert for a Venture Capital Group D: clinical analysis of public clinical trial data on hair cell regeneration
- 2021 Subject Expert for a Venture Capital Group E: clinical analysis of public clinical trial data on hair cell regeneration
- 2020 Subject Expert for a Venture Capital Group: hearing aid treatment for sensorineural hearing loss
- 2019 Subject Expert for a Venture Capital Group A: drug therapy for hearing loss
- 2019 Subject Expert for a Venture Capital Group B: drug therapy for Meniere's disease
- 2018 Subject Expert for a Venture Capital Group: drug treatment for hair cell regeneration

BIBLIOGRAPHY

Refereed papers

1. Mark A Parker (2020) Identifying Three Otopathologies in Humans. Hearing Research. Hearing Research, Accepted September 16, 2020. Published online September 24, 2020. <https://doi.org/10.1016/j.heares.2020.108079> 0378-5955.
2. Richard Hoben, Gifty Easow, Sofia Pevzner, Mark A. Parker (2017) Outer Hair Cell and Auditory Nerve Function in Speech Recognition in Quiet and in Background Noise. Frontiers in Neuroscience. 07 April 2017. eCollection 2017. PMID: 28439223 PMCID: PMC5383716 DOI: 10.3389/fnins.2017.00157. <https://doi.org/10.3389/fnins.2017.00157>.
3. Naomi Bramhall, Bonnie Ong, Josephine Ko, Mark A. Parker (2015) Speech Perception Ability in Noise is Correlated with Auditory Brainstem Response Wave I Amplitude. Journal of the American Academy of Audiology, Volume 26, Number 5, May 2015, pp. 509-517(9). PMID: 26055840 DOI: 10.3766/jaaa.14100 <http://dx.doi.org/10.3766/jaaa.14100>.
4. Mark A. Parker, Yen-fu Cheng, Hikaru Kinouchi, Rebecca Bieber, Albert S. Edge. (2014) An independent construct for conditional expression of atonal homolog-1. Human Gene Therapy Methods. Feb;25(1):1-13. doi:10.1089/hgtb.2013.014. Epub 2013 Oct 29. PMID: 24066662 PMCID: PMC3904653. Supported by NIH Grant # R03DC010065 (NIDCD).
5. Mark A. Parker (2011). Biotechnology in the Treatment of Hearing Loss: Foundations and Future of Hair Cell Regeneration. Journal of Speech Language and Hearing Research 54: 1709-1731. Supported by NIH Grant # R03DC010065 (NIDCD).
6. Mark A. Parker, Kevin Jiang, Judith Kempfle, Caitlin Simmons, Rebecca Bieber, Kunio Mizutari, Joe Adams, Albert S. Edge (2011). TAK1 Expression in the Cochlea: A Specific Marker for Supporting Cells. Journal of the Association for Research in Otolaryngology 12 (4) 471-483. Supported by NIH Grant # R03DC010065 (NIDCD).
7. Mark A. Parker, Aurora Brugeaud, Albert S. Edge (2010). Primary Culture and Plasmid Electroporation of the Murine Organ of Corti. . Journal of Video Experimentation. 36 <http://www.jove.com/index/Details.stp?ID=1685>, doi: 10.3791/1685. Supported by NIH Grant # R03DC010065 (NIDCD).
8. Mark A. Parker, Deborah A. Corliss, Brianna Gray, Julia K. Anderson, Richard P. Bobbin, M., Evan Y. Snyder, and Douglas A. Cotanche (2007). Neural Stem Cells Injected into the Sound-Damaged

- Cochlea Migrate Throughout the Cochlea and Express Markers of Hair Cells, Supporting Cells, and Spiral Ganglion Cells. *Hearing Research* 232 29–43.
9. Jonathan I. Matsui, Mark A. Parker, and Douglas A. Cotanche (2005). Regeneration and Replacement in the Vertebrate Inner Ear. *Drug Discovery Today* 10 (19): 1307-1312.
10. Mark A. Parker, Julia K. Anderson, Deborah A. Corliss, Victoria E. Abraria, Mahesh Lachyankar, Evan Y. Snyder, and Douglas A. Cotanche (2005). Expression Profile of a Neural Stem Cell Clone. *Experimental Neurology* 194(2): 320-32.
11. Mark A. Parker & Douglas A. Cotanche (2004). Therapeutic potential of stem cells on hearing loss. *Audiology and Neuro- Otology* 9:72-80.
12. Mark A. Parker, Haydee E. P. Bazan, Victor Marcheselli, Elena B. Rodriguez de Turco, and Nicolas G. Bazan (2002) Platelet-activating Factor Induces Permeability Transition and Cytochrome c Release in Isolated Brain Mitochondria. *Journal of Neuroscience Research* 69:39–50.

Invited editorials and reviews

13. Adel Elder & Mark A Parker (2021) Identifying Three Otopathologies in Humans. *The Hearing Journal*: June 2021 - Volume 74 - Issue 6 - p 14 doi: 10.1097/01.HJ.0000755496.85722.9e
14. Mark A Parker & Ivy Hsiao (2020) JOURNAL CLUB: Defining Different Types of “Hidden Hearing Loss” *The Hearing Journal*: May 2020 - Volume 73 - Issue 5 - p 16,19 doi: 10.1097/01.HJ.0000666424.17335.dd
15. Shuai Zheng & Mark A Parker (2019) Uncovering Hidden Hearing Loss. *The Hearing Professional* 68(3):14-16
16. Sarah Schwartzer & Mark A Parker (2019) Suicide, Self-harm Considerations in Holistic Audiological Care. *The Hearing Journal*: 72(6):26,27, June 2019.; doi: 10.1097/01.HJ.0000558448.44657.d4
17. Richard Hoben & Mark A. Parker (2016) Outer Hair Cell Damage: A Completely Different Listening Experience. *The Hearing Journal*: June 2016 - Volume 69 -Issue 6 - pp 10,12; doi: 10.1097/01.HJ.0000484546.98172.7a
18. Mark A Parker (2015). CSI Audiology: Window to an Unusual Vestibular Disorder. *Audiology Today* Volume 27 - Issue 1 pp 50-54
http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwj5Jz6w_fAhUrWVkkHWtfDyEQFjAAegQICRAC&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.671.9272%26rep%3Drep1%26type%3Dpdf&usg=AOvVaw3Lqt5JiTmV2Wr46k80qF6.
19. Efoe F. Nyatepe-Coo & Mark A. Parker (2015) Journal Club: Identifying the Role of the Spiral Ganglion in Speech Discrimination. *The Hearing Journal*: June 2015 - Volume 68 - Issue 6 - pp 19,22; doi: 10.1097/01.HJ.0000466874.97809.89.
20. Mark A Parker (2014). Moving Closer to a Gene Therapy for Hearing Loss. Submitted Mat 2014. *The Hearing Journal*: June 2014 - Volume 67 - Issue 6 - pp 26,27; doi: 10.1097/01.HJ.0000451364.63219.a5.
21. Mark A Parker (2014) ACA in 2014: Potential for Drastic Changes. May 2014 -Volume 67 - Issue 5 - p 6 doi: 10.1097/01.HJ.0000449896.78914.d9
22. Mark A Parker (2013) Journal Club: A Preliminary Step towards a Biologically Engineered Cochlea. *The Hearing Journal*. Submitted April 2013. June Volume 66 (6). doi: 10.1097/01.HJ.0000430862.78622.92

23. Mark A Parker (2012) Journal Club: Is Loss of Spiral Ganglion Neurons to Blame for Poor Speech Discrimination? The Hearing Journal. June, Volume 65 (6). doi: 10.1097/01.HJ.0000415188.18785.29
24. Mark A Parker (2011). From High-tech to Biotech: Developing the Hearing Aids of Tomorrow. The ASHA Leader July 7. Supported by NIH Grant # R03DC010065 (NIDCD).
25. Mark Parker & Robert Martin (2008). Gene therapy for hearing loss: An update. The Hearing Journal 61(6):46.

Interviews in public press

- Cindy Atoji Keene (2018) Researcher using gene therapy to battle hearing loss. On the Job Column. The Boston Globe, January 28. <https://www3.bostonglobe.com/business/2018/01/26/researcher-using-gene-therapy-battle-hearing-loss/iUwV1Yc1un8tcAMlOV0CNK/story.html?arc404=true>.
- Cindy Atoji Keene (2018) This audiologist is hear for you: Hearing aid advancements alleviate deafness. The Boston Globe Online. March 6. <https://www.boston.com/news/jobs/2018/03/06/this-audiologist-is-hear-for-you>.
- Sandra Guy (2017) Hearing loss increasingly a reality for people of all ages. Chicago Sun Times Aug 17. <https://chicago.suntimes.com/lifestyles/hearing-loss-increasingly-a-reality-for-people-of-all-ages/>.
- Alexandra Ossola (2017) Can This Startup Make A Drug To Give You Back Lost Hearing? Vocativ. May 08, 2017 <http://www.vocativ.com/427408/startup-manufacture-hearing-drug>.
- Brian Taylor, Au.D.(2016) The Role of Biotechnology in Audiology: An Interview with Dr. Mark Parker. Academy of Doctors of Audiology: Audiology Practices. <http://www.audiologypractices.org/the-role-of-biotechnology-in-audiology-an-interview-with-dr-mark-parker>.
- Jennifer Alsever (2016) Now Hear This. Fortune Magazine October 1 issue
- Jennifer Alsever (2016) Can a Pill Fix Your Hearing? Fortune Magazine Online. <http://fortune.com/2016/09/26/hearing-loss-cure-biotech-startups/>. Personal interview.
- Alissa Katz (2016) Cover Story: New Treatments Added into Hearing Loss Mix. The Hearing Journal: February 2016 - Volume 69 - Issue 2 - p 26,28,3 doi: 10.1097/01.HJ.0000480886.32838.a6
- Editor's Picks (2014) Can You Hear Me Now?: Obamacare may aid those with hearing loss. Tufts Medicine Magazine Summer ed. <https://sites.tufts.edu/medicine/summer-2014/can-you-hear-me-now/>
- Janelle Weaver (2014) Funding Pours in for Investigational Hearing Treatments. The Hearing Journal. September 2014 - Volume 67 - Issue 9 - pp 14,16,18,20. Personal interview in Cover Story.

THESES

Dissertation: The Role of PAF in Excitotoxic Neuronal Death (2001) (Mentor: Bazan). Discovered novel PAF binding site located within the mitochondrial membrane. LSU Health Sciences Center, New Orleans, LA

Master's Thesis: Independent acoustic stimulation of the amphibian and basilar papillae in rana pipiens. (1995) (Mentor: Randy Zellick) Characterized the regenerative capacity of the auditory system of deafened vertebrates. Portland State University, Portland, OR

PUBLISHED ABSTRACTS (Poster presentations)

- Kelley Stehura, Katherine Bergin, Christian Bourdon, Sofia Pevzner, Mark A Parker (2020) Can Hidden Hearing Loss be Predicted using Outer Hair Cell Normative Data? Association for Research in Otolaryngology Midwinter meeting. Virtual Presentation.
- Mark A. Parker (2021). Identifying Three Forms of Hidden Hearing Loss in Humans. Association for Research in Otolaryngology Midwinter meeting. Virtual Presentation.
- Mark A. Parker (2020). Identifying Three Forms of Hidden Hearing Loss in Humans. The American Academy of Audiology /Audiology NOW annual Convention New Orleans, LA. (event cancelled due to SARS-COV-19-CoV2 pandemic).
- Sofia Pevzner, Bridget Kosilla, Sarah Schweitzer, Richard Hoben, Mark A. Parker (2019). Operationally-defined Auditory Synaptopathy is Relatively Common in Humans but Does Not Correlate with Hearing-In-Noise Performance. Association for Research in Otolaryngology Midwinter meeting. Baltimore, MD.
- Richard Hoben, Sofia Pevzner, Mark A. Parker (2018). Hidden Hearing Loss: Anatomical correlates and clinical presentations. American Speech-LanguageHearing Association. Boston, MA.
- Richard Hoben, Maeve Salinger, Sofia Pevzner, Mark A. Parker (2018). Speech-in-Noise Performance is Primarily Governed by Outer Hair Cell rather than Auditory Nerve Function. Association for Research in Otolaryngology Midwinter meeting. San Diego, CA.
- Maeve Salinger, Sofia Pevzner, Richard Hoben, Mark A. Parker (2018). Does Synaptopathy Correlate with Hearing Aid Performance? Association for Research in Otolaryngology Midwinter meeting. San Diego, CA,
- Gifty Easow, Efoe Nyatepe-Coo, Mark A. Parker (2016). Speech Detection in the Presence Of Background Noise Is Affected by both Spiral Ganglion and Outer Hair Cell Function. Association for Research in Otolaryngology Midwinter meeting.
- Gifty Easow, Efoe Nyatepe-Coo, Mark A. Parker (2016). Both Hair Cells and Spiral Ganglion Neurons Contribute to Speech Perception in Noise. The American Academy of Audiology /Audiology NOW annual Convention.
- Mark A Parker (2016) American Auditory Society. The Functional Roles of Hair Cells and Spiral Ganglion Neurons in Complex Listening Situations. Scottsdale, AZ.
- Mark A. Parker, Yen-fu Cheng, Hikaru Kinouchi, Rebecca Beiber, Albert S Edge (2014) An Independent Construct for Conditional Expression of Atonal Homolog-1 (Atoh1). Association for Research in Otolaryngology Midwinter meeting.
- Rebecca Bieber, Fuxin Shi, Mark A. Parker (2012). Growing Very Hairy Spheres: An In vitro Model to Study the Biology of Cilia. Association for Research in Otolaryngology Midwinter meeting.
- Mark A. Parker, Kevin Jiang, Judith Kempfle, Kunio Mizutari, Caitlin Simmons, Albert S. Edge (2011) The Effects of Noise Exposure on TAK1 Expression in the Organ of Corti. Association for Research in Otolaryngology Midwinter meeting.
- Mark A. Parker, Kevin Jiang, Joe Adams, Albert S. Edge (2010). TAK1 Expression in the Cochlea: A Specific Marker for Supporting Cells. Association for Research in Otolaryngology Midwinter meeting.
- Mark A. Parker, Albert S. Edge (2008) Retrieval of Stem Cells from Co-cultured Otocysts. Association for Research in Otolaryngology Midwinter meeting.
- Mark A. Parker, Jenna Webster, Brianna Russo, Wen-Hann Tan, Douglas A. Cotanche (2007). Upregulation of Math1 Inhibits Stem Cell Proliferation. Association for Research in Otolaryngology Midwinter meeting.

- Mark A. Parker, Richard P. Bobbin, Deborah Corliss, Brianna Grey, Evan Y. Snyder, Douglas A. Cotanche (2005). Stem Cell Transplantation in the Mammalian Cochlea. Association for Research in Otolaryngology Midwinter meeting.
- Mark A. Parker, Evan Y Snyder, Douglas A Cotanche (2004) Therapeutic Potential of Stem Cells on Hearing Loss. International Society for Stem Cell Research.
- Mark A. Parker, Richard P. Bobbin, Brianna Grey, Adel Bakhtiarova, Evan Y. Snyder, Douglas A. Cotanche (2003) Detection of Stem Cells Transplanted into the Cochlea by Fluorescent In Situ Hybridization. Association for Research in Otolaryngology Midwinter meeting.
- Deborah A. Corliss, Mark A. Parker, Julia K. Anderson, Evan Y. Snyder, Douglas A. Cotanche (2003) Evidence of a Stem Cell Population by Gene Chip Analysis in the Murine Cochlea. Association for Research in Otolaryngology Midwinter meeting.
- Mark A. Parker, Corliss DA, Anderson JK, Lachyankar M, Snyder EY, & Cotanche DA (2003). Genetic Profile of Stem Cells using a Neuronal Clonal Stem Cell Line Society for Neuroscience 2003.
- Mark A. Parker, Deborah A Corliss, Julia K Anderson, M. Charles Liberman, Evan Y Snyder, Douglas A. Cotanche (2003). Neural Stem Cell Transdifferentiation into Cochlear Cell Types. Association for Research in Otolaryngology Midwinter meeting.
- Deborah A Corliss, Mark A. Parker, Evan Y Snyder, Douglas A. Cotanche (2003). Expression Profiles of Neural Stem Cells Compared to Cochlear Cells by Gene Chip Analysis and Immunohistochemistry. Association for Research in Otolaryngology Midwinter meeting 2003.
- Nicole J Falk, Julia K Anderson, Katherine M Williamson, Mark A. Parker, Dominic A. Mangiardi, Douglas A. Cotanche. (2003) Activation of Early-Stage Apoptotic Pathways in Short-Term Cultures of the Chick Basilar Papilla. Association for Research in Otolaryngology Midwinter meeting.
- Mark A. Parker, Haydee E. P. Bazan, Victor Marcheselli, Elena B. Rodriguez de Turco, and Nicolas G. Bazan, (2000) PAF Induces Permeability Transition and Cytochrome c Release in Isolated Brain Mitochondria. Society for Neuroscience.
- Mark A. Parker, Haydee E. P. Bazan, Victor Marcheselli, Elena B. Rodriguez de Turco, and Nicolas G. Bazan (1999) PAF Induces Swelling in Isolated Mitochondria. Society for Neuroscience.
- Mark A. Parker, Victor Marcheselli, Elena B. Rodriguez de Turco, and Nicolas G. Bazan (1999) PAF Modulates Cytosolic ROS Production from NMDA Treated Neurons. Greater New Orleans Society of Neuroscience.
- Mark A. Parker, Victor Marcheselli, Elena B. Rodriguez de Turco, and Nicolas G. Bazan (1998) The Effects of PAF on Mitochondrial Membrane Potential. Sixth International Congress on PAF and Related Lipid Mediators 1998.
- Mark A. Parker, Victor Marcheselli, Elena B. Rodriguez de Turco, and Nicolas G. Bazan (1998) The Effects of PAF on ROS Release from the Mitochondria. American Society for Neurochemistry.
- Mark A. Parker, Nicolas G. Bazan (1998) PAF Induces ROS Generation from Mitochondria in Primary Cortical Cultures. Society for Neuroscience.

INVITED LECTURES

- 2023 Presenter: Mark A Parker. Palm Springs Hearing Seminars. Conventional vs Over the Counter Amplification workshop. Palm Springs, CA
- 2022 Presenter: Mark A Parker. Managing Bothersome Tinnitus using Cognitive-Behavioral Therapy. . Palm Springs Hearing Seminars. Amplification workshop. Palm Springs, CA

- 2022 Presenter: Mark A Parker. American Speech Language and Hearing Association annual Convention. Using Outer Hair Cell Function to Measure Hidden Hearing Loss
- 2021 Presenter: Mark A Parker. Palm Springs Hearing Seminars. Amplification workshop. Palm Springs, CA
- 2021 Presenter: Mark A Parker. American Speech Language and Hearing Association annual Convention. Clinical Normative Data for Diagnosing Hidden Hearing Loss.
- 2021 Online Presenter: Mark A. Parker. The American Academy of Audiology /Audiology NOW annual Convention. Videoconference presentation. Using Otoacoustic Emissions to Diagnose Hidden Hearing Loss.
- 2020 Online Presenter: Mark A Parker. Palm Springs Hearing Seminars. Establishing a Safe Workplace for Yourself, Your Co-Workers, and Your Patients. Videoconference presentation.
- 2020 Online Presenter: Mark A Parker. Palm Springs Hearing Seminars. Introduction to Telehealth & Remote Programming. Videoconference presentation.
- 2019 Presenter: Mark A Parker. Palm Springs Hearing Seminars. Amplification workshop. Palm Springs, CA
- 2018 Presenter: Mark A Parker. Palm Springs Hearing Seminars. Providing Comprehensive Hearing Healthcare: Lessons from a multinational healthcare organization. Palm springs, CA
- 2018 Presenter: Mark A Parker. American Speech-Language-Hearing Association. Operationally-defined Auditory Synaptopathy is Relatively Common in Humans but Does Not Correlate with Hearing-In-Noise Performance. Boston, MA
- 2018 Presenter: Mark A Parker. Boston University Hearing Research Center (HRC) Seminar Series. Anatomical and Therapeutic Correlates of Hearing-in-Noise. Boston, MA
- 2018 Presenter: Mark A Parker. Association of Research in Otolaryngology Mid-Winter Meeting. Speech-in-Noise Performance is Primarily Governed by Outer Hair Cell rather than Auditory Nerve Function. San Diego, CA.
- 2018 Presenter: Mark A Parker. Association of Research in Otolaryngology Mid-Winter Meeting. Does Synaptopathy Correlate with Hearing Aid Performance? San Diego, CA.
- 2017 Presenter: Mark A Parker. Palm Springs Hearing Seminar. Hearing Aid Performance in Noise: Comparative Breakout Session. Palm Springs, CA.
- 2017 Presenter: Mark A Parker. Tufts University School of Medicine Otolaryngology Resident Lecture, Measuring Hidden Hearing Loss: Synaptopathy, Auditory Neuropathy, and Hair Cell Dysfunction. Tufts Medical Center. Boston, MA
- 2016 Presenter: Mark A Parker. Palm Springs Hearing Seminar. Anatomical Correlates of Speech Recognition in Quiet and Noise: Implications for HA Fitting. Palm Springs, CA.
- 2016 Presenter: Mark A Parker. University of California at San Francisco Otolaryngology Grand Rounds. Outer Hair Cell and Auditory Nerve Function in Hidden Hearing Loss, Speech in Quiet, and Speech in Noise. San Francisco, CA
- 2016 Presenter: Mark A Parker. Eaton-Peabody Laboratories Seminar Series. The Functions of Human Inner Hair Cells, Outer Hair Cells, and the Auditory Nerve in Hearing at Threshold, in Quiet, and in Background Noise. Massachusetts Eye & Ear Infirmary. Boston, MA
- 2016 Presenter: Mark A Parker. The American Academy of Audiology/Audiology NOW! Both Hair Cells and Spiral Ganglion Neurons Contribute to Speech Perception in Noise. Phoenix, AZ
- 2016 Presenter: Mark A Parker. American Auditory Society. The Functional Roles of Hair Cells and Spiral Ganglion Neurons in Complex Listening Situations. Scottsdale, AZ

- 2015 Presenter: Mark A Parker. Palm Springs Hearing Seminar: Translating Basic Science to Hearing Healthcare. Audiology Fitting Case Studies. Palm Springs, CA.
- 2015 Presenter: Mark A Parker. Minnesota Academy of Audiology Upper Midwest Audiology Conference. Using Biotechnology to Treat Hearing Loss: New Methods of Stem Cell and Gene Therapies to Stimulate Hair Cell Regeneration. Bloomington, MN.
- 2014 Presenter: Mark A Parker. The Open Forum. Recent advances in bone anchored hearing aids. New York, New York.
- 2014 Presenter: Mark A Parker. eAudiology Web Seminars, The American Academy of Audiology. Using Biotechnology to Treat Hearing Loss: New Methods of Stem Cell and Gene Therapies to Stimulate Hair Cell Regeneration. Recorded March 12, 2014.
<http://eo2.commpartners.com/users/audio/session.php?id=11882>.
- 2014 Presenter: Mark A Parker. The American Academy of Audiology/Audiology NOW! Uncovering the Relationship Between Auditory Neuronal Loss and Speech Perception. Presenter: Naomi Bramhall. Contributors: Mark A Parker, Josephine Ko, Bonnie Ong.
- 2013 Presenter: Mark A Parker. The Open Forum. Hearing aids: To dispense or dispense with? Colorado Springs, CO.
- 2013 Presenter: Mark A Parker. Palm Springs Hearing Seminar: Changing Landscape in HealthCare: How ObamaCare may affect your practice. Palm Springs, CA.
- 2013 Presenter: Mark A Parker. National Center for Rehabilitative Auditory Research. Monthly Seminar Series. Hair Cell Regeneration Using Stem Cell and Gene Therapies. Portland, OR.
- 2013 Presenter: Mark A Parker. The American Academy of Audiology /Audiology NOW! Biotechnological Treatments for SNHL: Status of Stem Cell and Gene Therapies. Anaheim, CA.
- 2012 Presenter: Mark A Parker. Palm Springs Hearing Seminar: Biotechnological Treatments for Hearing Loss. Palm Springs, CA.
- 2012 Presenter: Mark A Parker. Florida Academy of Audiology Convention. How Genes can be Used to Treat Hearing Loss. St. Augustine, FL.
- 2012 Presenter: Mark A Parker. The Open Forum. Integrating Successful Audiology and ENT Practices. New York, NY.
- 2012 Presenter: Mark A Parker. Eaton-Peabody Laboratories Seminar Series. Targeted gene expression in cochlear supporting cells. Massachusetts Eye & Ear Infirmary. Boston, MA
- 2012 Presenter: Mark A Parker. The American Academy of Audiology /Audiology NOW! Of Mice and Men; What animal models can tell us about hearing, hearing loss, and hair cell regeneration. Boston, MA.
- 2012 Presenter: Mark A Parker. South Carolina Speech-Language-Hearing Association. Biotechnology in the Treatment of Hearing Loss: Stem Cell and Gene Therapy. Myrtle Beach, SC.
- 2011 Presenter: Mark A Parker. Palm Springs Hearing Seminar: What Every Audiologist Should Know About Implantable Hearing Aids. Palm Springs, CA.
- 2011 Presenter: Mark A Parker. University of Miami Miller School of Medicine. Department of Otolaryngology Ground Rounds. From High-tech to Biotech: Developing the Hearing Aids of Tomorrow. Miami, FL.
- 2010 Presenter: Mark A Parker. Palm Springs Hearing Seminar: What Every Audiologist Should Know About Genetic Testing for Hearing Loss. Palm Springs, CA.

- 2009 Presenter: Mark A Parker. Harvard Medical School and Massachusetts Eye and Ear Infirmary. Molecular Biology of the Ear Research Group. TAK 1 expression in the developing cochlea. Boston, MA
- 2009 Presenter: Mark A Parker. American Speech, Language, and Hearing Association. Stem Cells and Gene Therapy in Treatment of Hearing Loss. New Orleans, LA.
- 2009 Presenter: Mark A Parker. Harvard Stem Cell Institute and Center for Nervous System Repair: Inducible gene expression in the auditory system. Boston, MA.
- 2009 Presenter: Mark A Parker. Association for Research in Otolaryngology Midwinter Meeting Podium Session: Inducible expression of Atoh1 in organ of Corti explants. Baltimore, MD.
- 2008 Presenter: Mark A Parker. Palm Springs Hearing Seminar: Genetic mechanisms of hair cell regeneration. Palm Springs, CA.
- 2006 Presenter: Mark A Parker. Palm Springs Hearing Seminar: Development of the auditory system. Palm Springs, CA.
- 2003 Presenter: Mark A Parker. Association for Research in Otolaryngology Midwinter Meeting Podium Session: Therapeutic potential of stem cells in hearing loss. St. Petersburg, FL.
- 2003 Presenter: Mark A Parker. Widex Annual Meeting Biologic: Approaches to the Treatment of Hearing Loss. Algarve, Portugal
- 2002 Presenter: Mark A Parker. Palm Springs Hearing Seminar: Biological Approaches to the Treatment of Hearing Loss: Hair Cell Regeneration and Stem Cell Therapy. Palm Springs, CA.
- 2002 Presenter: Mark A Parker. Massachusetts Eye and Ear Infirmary Research FOCUS Conference: Therapeutic Effects of Stem Cells in Hearing Loss. Boston, MA.
- 2000 Presenter: Mark A Parker. Society for Neuroscience Podium Session: The Effects of PAF on Brain Mitochondrial Permeability Transition. New Orleans, LA.

References: Provided upon request.