Michael W. Denham, MPhil

Curriculum Vitae

U.S. Citizen

E-mail: michael.denham@columbia.edu, Phone: (504) 201-4316 Address: 100 Haven Ave, Apt 22H, New York, NY 10032

Education

Columbia University

Expected May 2024

Vagelos College of Physicians & Surgeons, New York, NY

MD/MS in Biomedical Sciences Candidate

Churchill College, University of Cambridge, Cambridge, UK

July 2019

Department of History and Philosophy of Science

Master of Philosophy in Health, Medicine, & Society

Graduated with Distinction

Dissertation: Bloodlust: A case study of Theranos and the embodiment of a brand's values in a chief executive.

Supervised by Stuart Hogarth

Louisiana State University Honors College, Baton Rouge, LA

May 2018

Bachelor of Science in Chemical Engineering (Biomolecular Concentration)

Bachelor of Arts in Economics

GPA: 3.94

Summa cum laude, Phi Beta Kappa

College Honors, Upper-Level Distinction, and Distinguished Communicator

HBX | Harvard Business School

August 2016

CORe: Credential of Readiness, Pass with High Honors

Research and Work Experience

Co-Investigator | Columbia University

2020 - Present

- Supervised under Dr. Anil Lalwani at Columbia Department of Otolaryngology-Head & Neck Surgery in New York, NY
- Design, conduct, and recruit participants for a prospective clinical research study to examine the relationship between music enjoyment and hearing loss.
- Explore the association between cochlea-carotid interval on CT imaging and sensorineural hearing loss through imaging and chart review as well as data analysis.

Co-Investigator | Cambridge Coaching

2018 - 2020

- Supervised under Dr. Jeffrey Geller at Columbia Department of Orthopedics in New York, NY
- Investigate outcomes of patients who underwent total hip arthroplasties via the Modified Watson-Jones technique via chart review and data analysis to quantify the postoperative benefit of supine versus lateral positioning.

Tutor | Cambridge Coaching

2018 - 2020

• Tutored students for math, economics, and admissions tests (ACT, GMAT, MCAT)

Research Assistant | Batzer Laboratory of Comparative Genomics

2014 - 2018

- Supervised under Dr. Mark Batzer at LSU Department of Biological Sciences in Baton Rouge, LA
- Analyzed young Saimiri-specific Alu elements to determine subspecies-specific
 molecular markers and elucidate squirrel monkey phylogenetic relationships for an
 Honors Thesis. Developed skills in PCR, gel electrophoresis, sequencing, primer design,
 and Python.
- Mentored undergraduates, including explaining procedures and training students to use equipment, and developed new laboratory website using HTML and CSS. Designed laboratory logo.

Extracurricular and Volunteer Activities

Honor Code Representative | Columbia VP&S Student Council

2019 - Present

- Promote Honor Code principles among the student body and serve as a confidential advisor for students with questions involving these principles
- Selected for task force of VP&S faculty and students during the summer and fall of 2020 to rewrite the Student Honor Code and align the Honor Code Committee and its referral service with principles of restorative justice

Participant | Narrative Medicine Journalism Workshop

2020 - Present

• Chosen as one of twelve medical students and physicians to create journalistic and narrative articles about medicine during bimonthly workshop sessions led by Columbia and Penn journalism professor Stephen Fried

Committee Member | Columbia VP&S Junior Admissions Committee

2022 - Present

 Interview and evaluate candidates for matriculation at Columbia VP&S for the Columbia-Bassett program

Mentor | Columbia Biomedical Engineering Society

2022 - Present

• Advise and support four undergraduate students as they consider pursuing a career in medicine

Co-Chair | Systems, Leadership, Integration, & Management (SLIM) Committee 2019 – 2020

- Managed events and projects related to SLIM, including development of SLIM curriculum, interprofessional education, and quality improvement research opportunities
- Represented Columbia at the 2020 Choosing Wisely Students & Trainees Advocating for Resource Stewardship (STARS) Leadership Summit at UT Austin Dell Medical School

President | Walker Percy Literary Society

2019 - 2020

Lead monthly book club meetings and created a reading list for matriculating students

Information Services Volunteer | COVID-19 Student Service Corps (CSSC)

2020

 Developed patient-facing educational materials, managed the national and Columbia CSSC Twitter accounts, and served as the head CSSC contact for Departments of Urology and Physiology & Cellular Biophysics

2019

Volunteer | NYC Ballet Movement Workshop for Children with Physical Disabilities

Danced as a buddy for children with cerebral palsy and other movement disorders

Co-Founder of OSIRIS | Cambridge, United Kingdom

2018 - 2019

- Developed a technological solution for the monitoring of restenosis for patients with peripheral arterial disease under the Cambridge MedTech Foundation Innovation Programme
- Awarded "Most Innovative Technology" for the Churchill College Cambridge Enterprise Competition in 2019

President and Founder | National Alliance on Mental Illness (NAMI) at LSU 2016 – 2018

- Promoted positive understanding of mental health through local, state, and national education and advocacy efforts
- Created NAMI and Chill, an interactive monthly program engaging students in discussion of media portrayal of mental illness
- Led 20 Louisiana mental health professionals and advocates to Capitol Hill to discuss funding for mental health resources with legislators at the 2017 NAMI National Convention in Washington, D.C.
- Named LSU's Most Outstanding New Organization of the Year

Senior Advisor | YMCA Louisiana Youth & Government Alumni Program 2014 – 2018

- Organized two annual statewide debate conferences, Model United Nations in the fall and Youth Legislature in the spring, for hundreds of Louisiana high school students to promote civic engagement and servant leadership
- Mentored students to implement new programs for these conferences while developing students' leadership skills through workshops and mock interviews

Camp Director & Jeopardy Chair | American Institute of Chemical Engineers 2014 – 2018

- Managed the 2018 AIChE Southern Regional Jeopardy Competition, including coordination of team registration, question-writing, and rule-enforcement
- Directed a summer camp for sophomores in Chemical Engineering, increasing camp enrollment by 50% while recruiting industry professionals and professors for workshops

Global Brigades Medical/Dental Brigade Volunteer | Platanilla, Panama

2015

 Provided access to health care resources to underserved communities during a medical mission trip

Skills

Proficiency in English and Spanish Programming with R, MATLAB, Python, HTML, & CSS Public speaking

Honors and Awards

Joseph Collins Foundation Scholarship

2021-2023

2022

Medical Fellow, Fellowships at Auschwitz for the Study of Professional Ethics (FASPE)

AAO-HNSF Medical Student Travel Grant	2022
Potter Scholarship	2021-2022
VP&S250 Roy and Diana Vagelos Scholarship	2019-2022
Seymour L. Kaplan Foundation Scholarship	2020
Alan and Ruth Borenstein Medical Scholarship	2020
Forrester Prize (Highest marks on dissertation in HMS MPhil)	2019
Benyamin Habib Prize (Highest marks on assessed essays in HMS MPhil)	2019
Phi Kappa Phi Fellow	2018
LSU Tiger Twelve	2018
LSU Ogden Honors College Outstanding Senior	2018
LSU Legacy Award	2018
Phi Kappa Phi Outstanding Senior	2018
Ochsner Health System STAR Outstanding Alumnus Award	2018
American Institute of Chemists Award	2018
Cain Department of Chemical Engineering Chair's Award	2018
Brookshire Scholarship	2018
Paul N. Howell Endowed Memorial Scholarship	2017 - 2018
President's Future Leaders in Research Program	2014 - 2018
MATHCOUNTS/Thomas H. Hopkins Scholarship	2014 - 2018
Boykin & Mable Pegues Scholarship	2014 - 2018
Flagship Scholars Award	2014 - 2018
Taylor Opportunity Program for Students (TOPS) Honors Recipient	2014 - 2018
Schwarzman Scholars Semi-Finalist	2017
John L. McGee Scholarship	2017
LSU Department of Economics Outstanding Student in Microeconomics	2016
Finalist in The Economist Brightest Minds Scholarship	2016
LSU Honors College Sophomore Honors Distinction	2016
National Society of High School Scholars Emerging Leader Award	2016
LSU Alumni Association Global Leaders Award	2015
National Merit Scholarship	2014

Peer-Reviewed Publications

- 1. Jasmine N. Baker, Jerilyn A. Walker, John A. Vanchiere, Kacie R. Phillippe, Corey P. St. Romain, Paulina Gonzalez-Quiroga, **Michael W. Denham**, Jackson R. Mierl, Miriam K. Konkel, Mark A. Batzer. Evolution of Alu Subfamily Structure in the *Saimiri* Lineage of New World Monkeys. *Genome Biology and Evolution*, Volume 9, Issue 9, 1 September 2017, Pages 2365-2376, https://doi.org/10.1093/gbe/evx172
- 2. Jasmine N. Baker, Jerilyn A. Walker, **Michael W. Denham**, Charles D. Loupe III, and Mark A. Batzer. Recently Integrated Alu Insertions in the Squirrel Monkey (*Saimiri*) Lineage and Application for Population Analyses. *Mobile DNA*, Volume 9, Issue 1, 12 February 2018, https://doi.org/10.1186/s13100-018-0114-7
- 3. **Michael W. Denham**, Alexander Chern. Giving Children with Deafness a Cape: Amplifying Diverse Portrayals of Hearing Loss in Media. *Ear, Nose & Throat Journal*, 24 March 2022. https://doi.org/10.1177/01455613221087941

- 4. **Michael W. Denham**, Justin Golub. Does Hearing Rehabilitation Mitigate the Association Between Hearing Loss and Cognitive Impairment? *Current Otorhinolaryngology Reports*, 12 July 2022. https://doi.org/10.1007/s40136-022-00412-7
- 5. Alessandro Luna, **Michael W. Denham**. Artificial intelligence provides congruent and prescriptive feedback for squat form: a qualitative assessment of coaching provided by AI and physical therapist. *Journal of Comparative Effectiveness Research*, 3 Aug 2022. https://doi.org/10.2217/cer-2021-0253
- 6. Alexander Chern, **Michael W. Denham**, Rahul K. Sharma, Alexis S. Leiderman, Amanda J. Ucci, Jennifer M. Jones, Dean Mancuso, Ilana P. Cellum, Jessica Galatioto, Anil K. Lalwani. Hearing Aids Enhance Music Enjoyment in Individuals with Hearing Loss. *Otology & Neurotology*, 1 September 2022, Volume 43, Issue 8, pg. 874-881. doi: 10.1097/MAO.00000000000003595
- 7. **Michael W. Denham**, Rachel E. Weitzman, Justin S. Golub. Breaking through the silence: Hearing aids and cochlear implants in the prevention of cognitive decline and dementia. *JAMA Neurology*. Accepted, awaiting publication.
- 8. Alexander Chern, **Michael W. Denham**, Alexis S. Leiderman, Rahul K. Sharma, Irene W. Su, Amanda J. Ucci, Jennifer M. Jones, Dean Mancuso, Ilana P. Cellum, Jessica A. Galatioto, Anil K. Lalwani. The Association of Hearing Loss with Active Music Enjoyment in Hearing Aid Users. Submitted.
- 9. Christian Pearsall*, **Michael W. Denham***, Jeremy S. Frederick, Omar K. Farah, Jakub Tatka, Roshan P. Shah, Jeffrey A. Geller. A Comparison of Postoperative Outcomes Between Supine and Lateral Patient Positioning in Total Hip Arthroplasty Using the Anterior Based Muscle Sparing Surgical Approach. Submitted.
- *Denotes equal contributors

Abstracts for Oral Presentations

- 1. **Michael W. Denham**. Bloodlust: A case study of Theranos and the embodiment of a brand's values in a chief executive. Conference on Everything, Churchill College, University of Cambridge, Cambridge, United Kingdom. April 2019.
- 2. **Michael W. Denham**. Assessing the Impact of Hearing Loss and Hearing Aid Use on Music Enjoyment. NIH Summer Research Program Symposium, Columbia University, New York, NY. August 2020.
- 3. **Michael W. Denham**, Kathleen Goodwin, A. Nikolai von Krusenstiern, Craig Blinderman, Trudi Cloyd, Hetty Cunningham, Alyson Fox, Samuel Quiah. Prioritizing restorative justice: shifting focus to repairing harm and healing community within a medical school. Association of American Medical Colleges (AAMC) Group on Educational Affairs (GEA) Regional Spring Meeting. April 2021.
- 4. Alexander Chern, **Michael W. Denham**, Rahul K. Sharma, Alexis Leiderman, Anil Lalwani. Hearing Aids Enhance Music Enjoyment in Individuals with Hearing Loss. American Academy

- of Otolaryngology Head and Neck Surgery Foundation Annual Meeting & OTO Experience, Los Angeles, CA. October 2021. https://doi.org/10.1177%2F01945998211030908f
- 5. **Michael W. Denham**. Approaching Voice Disorders in the Elderly: The Aging Voice. UB Oto Chautauqua Virtual Conference, Buffalo, NY. July 2022.
- 6. **Michael W. Denham**, Maeher R. Grewal, Justin S. Golub. A Systematic Review of Ergonomic Considerations in Endoscopic Ear Surgery. 4th World Congress on Endoscopic Ear Surgery, Kyoto, Japan. December 2022. Accepted.
- 7. **Michael W. Denham** and Justin S. Golub. Hearing Loss is Associated with Increased Substance Use in a Multicentered American Cohort. International Federation of Otorhinolaryngological Societies (IFOS), Dubai, United Arab Emirates. January 2023. Accepted.
- 8. Maeher R. Grewal, **Michael W. Denham**, Justin S. Golub. Hearing Loss is Associated with Greater Measures of Despair. International Federation of Otorhinolaryngological Societies (IFOS), Dubai, United Arab Emirates. January 2023. Accepted.
- 9. Christopher Trepanier, Reginald Scott Widemon, **Michael W. Denham**, Betsy Szeto, Anil K. Lalwani, Gul Moonis. Cochlear-Carotid Dehiscence: A Case Series Investigating Potential Correlation with Hearing Loss. American Society of Neuroradiology Annual Meeting, Chicago, IL. April-May 2023. Submitted.

Abstracts for Poster Presentations

- 1. **Michael W. Denham**. Bloodlust: A case study of Theranos and the embodiment of a brand's values in a chief executive. Preventing Overdiagnosis Conference, Sydney, Australia, December 2019, Supplement in *BMJ Evidence-Based Medicine* 2019;24:A63. http://dx.doi.org/10.1136/bmjebm-2019-POD.129
- 2. Alexander Chern, **Michael W. Denham**, Alexis S. Leiderman, Rahul K. Sharma, Amanda J. Ucci, Jennifer M. Jones, Dean Mancuso, Ilana P. Cellum, Jessica Galatioto, Anil K. Lalwani. Music discrimination impacts music enjoyment among individuals with hearing loss. American Auditory Society Annual Conference, Scottsdale, Arizona. February 2021.
- 3. Alexander Chern, **Michael W. Denham**, Alexis Leiderman, Rahul K. Sharma, Anil Lalwani. Hearing Aids Enhance Activate Music Enjoyment Among Individuals with Hearing Loss. American Otological Society at COSM, Dallas TX. April 2022.
- 4. Alexander Chern, **Michael W. Denham**, Anil K. Lalwani. Efficacy of Hearing Aids on Music Perception in Individuals with Hearing Loss: A Systematic Review. Accepted. American Academy of Otolaryngology—Head and Neck Surgery Foundation Annual Meeting & OTO Experience, Philadelphia, PA. September 2022.
- 5. **Michael W. Denham**, Justin S. Golub. Multiple Forms of Stress May Be Associated with Audiometric Hearing Loss in a National Cohort. Triological Society Combined Sections Meeting, Coronado, CA. January 2023. Accepted.

- 6. **Michael W. Denham**, Michelle L. Arnold, Victoria A. Sanchez, Frank R. Lin, Jose A. Luchsinger, Justin S. Golub. Design and Methods of the Early Age-Related Hearing Loss Intervention (EARHLI) Randomized Controlled Trial. American Neurotology Society at COSM, Boston, MA. May 2023. Submitted.
- 7. Emily Ishak, **Michael W. Denham**, Maeher R. Grewal, Justin S. Golub. Ageism in Hearing Loss Diagnosis and Treatment. American Otological Society at COSM, Boston, MA. May 2023. Submitted.

Additional Publications

- 1. **Michael W. Denham**. "Her Index Card Drawer". *Reflexions*, Volume 26, 2020. https://drive.google.com/file/d/1gNHOF1WV1vAGo986eoxXv-UXPObaeerq/view
- 2. **Michael W. Denham**. "You Can't Dissect a Virtual Cadaver". *Nautilus*, Issue 99, Chapter 5, 5 May 2021. https://nautil.us/issue/99/universality/you-cant-dissect-a-virtual-cadaver
- 3. **Michael W. Denham**. "The Year Gross Anatomy Faced the Scalpel". *Hektoen International Journal*, 18 August 2021. https://hekint.org/2021/08/17/the-year-gross-anatomy-faced-the-scalpel/
- 4. **Michael W. Denham**, Alexander Chern. "Live music is back; bring your earplugs: Public health demands we protect our hearing". *New York Daily News*, 25 September 2021. https://www.nydailynews.com/opinion/ny-oped-live-music-back-bring-earplugs-20210925-oivl7nibf5dkfdmd5dkdpd25re-story.html
- 5. Alexander Chern, **Michael W. Denham**. "Marvel targets hearing loss in new miniseries 'Hawkeye'". *Orange County Register*, 10 February 2022. https://www.ocregister.com/2022/02/10/marvel-targets-hearing-loss-in-new-miniseries-hawkeye/
- 6. **Michael W. Denham**. "When the Surgeon Was an Uneducated Barber". *Nautilus*, 27 July 2022. https://nautil.us/when-the-surgeon-was-an-uneducated-barber-22409/
- 7. Alexander Chern, **Michael W. Denham**. "Fighting the Stigma of Hearing Loss: Superheroes Come to the Rescue". *The Hearing Journal*, Volume 75, Issue 9, September 2022, p 18, 20. https://doi.org/10.1097/01.hj.0000874600.30744.c8
- 8. **Michael W. Denham**. "What We Really Are Is an Agglomeration of Cells". *Nautilus*, 12 October 2022. https://nautil.us/what-we-really-are-is-an-agglomeration-of-cells-242259/

Grants

- 1. National Institutes of Health (NHLBI) National Research Service Award (NRSA) Short-Term Institutional Research Training Grant (No. 5T35HL007616-40). Columbia University. June 2020 August 2020. \$5,275.
- 2. Dean's Research Fellowship. Columbia University. April 2022 March 2023. \$32,000.

Journal Reviewer

Laryngoscope Investigative Otolaryngology	2022-Present
Otology & Neurotology	2022-Present
Frontiers in Neurology	2022-Present
Annals of Otology, Rhinology & Laryngology	2022-Present

Professional Memberships

American Academy of Otolaryngology—Head and Neck Surgery (Member) 2021-Present

Media, Interviews, and Press

1. Brian Gallagher. Michael Denham Takes Us Behind "When the Surgeon Was an Uneducated Barber". *Nautilus*, Nautilus Behind the Scenes. 7 August 2022. https://vimeo.com/736958677?utm_source=nautilus-newsletter&utm_medium=email [Video interview]

Hobbies/Interests

Ragtime and classical piano, guitar, film, writing, interior design, cooking