



MICHAEL K. LOWE

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Resident Physician at HCA Healthcare, TriStar Health (Nashville, TN) with an interest in interventional pain management and minimally invasive spine procedures, as well as advocacy for neurology as an important contributor to these fields. Later-career physician with background as med-tech CEO (Houston Business Journal as a "40 Under 40" outstanding executive), Fortune 500 experience at Philips Medical, and Rice MBA. Innovator with over 20 issued medical technology patents, and leadership profile including several Board seats.

Post Graduate Training

[HCA Healthcare](#)

[TriStar Skyline Medical Center](#)

Neurology Residency Program

2025 - Present

[HCA Healthcare](#)

[TriStar Centennial Medical Center](#)

Transitional Year Residency

07/2024 – 2025

[American Academy of Neurology](#) – Member ID: 384946

[American Academy of Pain Medicine](#) – Member ID: 452597

[Spine Intervention Society](#) – Member since 2023

[American Society of Interventional Pain Physicians](#) – Member since 2022

[American College of Sports Medicine](#) – Member ID: 918644

[American Medical Society for Sports Medicine](#) – Member ID: 15299

[American Society of Pain & Neuroscience](#) – Young Innovators Member, 2023 (Member ID: 67931316)

[Dr. Shel's Health & Wellness](#)

Consultant

02/2020 to 05/2022

Part-time team member of family-owned medical and dental practices to supplement income during medical school

- Business supervisor of financial statement/performance reporting for businesses totaling \$15 million Revenue
- Implementation of iTero digital scanning and Arestin® oral antibiotics for dental practice

[Noleus Technologies, Inc.](#)

President

01/2020 to 05/2020

Medical device development-stage company focused on treatment of postoperative ileus associated with abdominal region surgery

- Oversaw animal trials ([Mayo Clinic](#), Rochester, MN), & site selection for first-in-human, feasibility, and pivotal trials
- Managed all aspects of product development and FDA submission package
- Directed all fiscal activities including sale of company equity stock and convertible debt to finance operating budgets

[SmileSnap](#)

Chief Operating Officer

01/2018 to 01/2020

Software/SaaS start-up that develops telehealth platforms to sell into dental practices to drive increased new patient acquisition

- Cofounder – led financing with 3 rounds of private investment
- Established back office including all accounting, sales reporting, business systems, and financial controls
- Successful pilot with 500-location group dental practice expanded to Revenue generation + profitability in 7 months

OrthoAccel Technologies Inc.

Chairman & CEO

05/2007 to 12/2016

Deloitte FAST 500 fastest growing tech companies in North America list (#69, 2015 1,171% growth; #166, 2016 510% growth)

- 200-employee medical device organization, global HQ Bellaire, TX and EMEA HQ in Essen, Germany
- Led product development, manufacturing, & market launch of FDA-regulated AcceleDent line into 70 countries
- 80,000 units shipped to 3,300 accounts in North America in first 5 years
- Capitalized business with S3 Ventures, HealthpointCapital, Piper Jaffray, Silicon Valley Bank, Texas ETF

Philips

Global Brand & Innovation Manager

01/2000 to 07/2005

Philips Oral Healthcare, \$350 million Business Unit of Fortune 500 company focused on Sonicare brand

- Created Key Accounts function & grew to 30 dental service organizations/group practices, \$20 million Revenue
- Co-managed deployment of sales and marketing organizations in EMEA, APAC, and AMEC
- New product development for line down-extension of child/teen Sonicare brand, +25% incremental market

Optiva

Sales Manager

06/1998 to 12/1999

Inc. 5000 #1 Fastest Growing Private Company, with 31,507% growth (1997), acquired by Philips in 2000

- Managed a five-state territory generating \$2 million Revenue
- Rookie of the Year (1998), Sales Representative of the Year (1999)

Gaps in Professional History

7/2005 – 5/2007	Full-time Student, Rice University MBA Program
1/2017 – 12/2017	Self-employed, Texas Capital acquisition of SBA-financed small business (currently passive owner)
05/2020 – 05/2024	Full-time Student, Ross University School of Medicine

Prior Education

Ross University School of Medicine

MD

- *Highest Honors*, 3.85 Cumulative GPA
- Rho Mu Delta Medical Honors Society inaugural member, recognizing service to profession and community
- Completed Foundations of Medicine via Accelerated Curriculum Track; Awarded Ross Success Scholarship
- USMLE Step 1 – PASS; USMLE Step 2 - 249

Rice University, Jones Graduate School of Business - Houston, TX

MBA

Jones Scholar with 3.97 cumulative GPA

Represented Rice as 1 of 8 finalists (400+ entries) at NUS Business Plan Competition in Singapore

Represented Jones School in 2007 Rice Business Plan Competition (Cateko Diagnostics)

Internships, med-tech focused, AlphaDev (now [Fannin Innovation Studio](#)) and [Mercury Fund](#) venture capital

Louisiana State University Dental School - New Orleans, LA

(No Degree – Early Departure)

Scored 90th percentile, Step One National Dental Board Examination

Scored 19 on Dental Admission Test (DAT)

Graduated *magna cum laude*

Treasurer, Interfraternity Council (IFC)

FINRA Series 3 License (Futures, Derivatives, and Commodities)

ICC (International Code Council) B1 License – Residential Buildings

Additional Professional Accomplishments and Affiliations

- [California Institute of Behavioral Neurosciences & Psychology](#), Member (2022)
- [Noninvasix](#), Board of Directors (2017 - 2019) – *medical device company*, [Philips](#) is strategic partner and investor
- [Medical Bridges](#), Advisory Council (2020) – *non-profit providing medical supplies to underserved communities*
- [Partnership for Baylor College of Medicine](#), Patron and Member (current)
- [BidMySmile](#), Board of Directors (2017 – 2018) – *aggregator platform for comparing dental care*
- Houston Technology Center, Board of Directors (2017, now [Houston Exponential](#))
- [Kailo Nutrition](#), Advisory Board (2020 – current) – *dietitian-developed nutrition counseling*
- [Amerria](#), Advisory Board (2010 – current) – *medical animation agency*
- [BEMY Cosmetics](#), Advisory Board (2017 – current) – *mRNA and small molecule proprietary skin base formulations*
- [Century Park Capital](#), Advisor on 2 undisclosed buy-side private equity healthcare diligence projects (2017, 2019)
- Undisclosed, Advisor on \$20 million sell-side transaction of 9-location group healthcare practice (2020)
- [Milkscreen](#), Interim Chief Operating Officer (2007, acquired by UpSpring Baby)
- [SimplexityMD](#), Intern and Portfolio Company Licensing Oversight (2007) – *medical device venture capital fund*
- [BioHouston](#), Member (2007 – 2016), DeBakey Award Winner (2007)
- [Rice University](#) – Guest lecturer, Jones Graduate School of Management (2010 – current)
- [Rice Alliance](#), Rice Business Plan Competition, Molter Award Judge (2012 – 2017)
- [Westbrook Intermediate School](#) (Webster, TX), Mini-course Teacher, developed *Stock Market for Kids* course (2019)
- [Fairmont Orthodontics](#) – part-time marketing and management (2005 – 2020)
- [Bay Area Houston Ballet & Theatre](#), 501 (c)(3) Capital Campaign Lead *via* The Ironman Foundation (2019)
- Named inventor on 22 medical device [US patents](#), including product that was commercialized under the AcceleDent brand, used in a randomized controlled clinical trial and published in a peer-reviewed journal ([Angle Orthod](#), 2016 Jul;86(4):625-30, doi: 10.2319/072115-492.1)

Certificates and Certifications

Basic Life Support Provider (CPR and AED), American Heart Association, January 2022
Advanced Cardiovascular Life Support Provider, American Heart Association, January 2022
Pediatric Advanced Life Support Provider, American Heart Association, January 2022
Certificate of EHR Office Proficiency (CEOP), 4MED, August 2022
Certificate of Medical Practice Security Proficiency (CMPSP), 4MED, August 2022
Certificate of Patient Communication Proficiency (CPATCP), 4MED, August 2022
Certified Patient Centered Medical Home Professional (CPMHP), 4MED, August 2022
Certificate of MACRA-MIPS Proficiency (CMMP), 4MED, August 2022
Certificate of Mandated Compliance, Infection Control and Barrier Protection, with BBP, PPE, NSS, Sepsis, and TB Prevention, 4MED, December 2021
Certificate of Annual HIPAA Workforce Proficiency (CHWP), 4MED, December 2021
Certificate of Annual OSHA for Healthcare Proficiency (COHP), 4MED, December 2021
Certificate of PPE for Infectious Disease Protection Proficiency (CPPEIDP), 4MED, December 2021
Tropical Medicine 101, Nuvance Health, March 2022
Cases from Mulago, Nuvance Health, March 2022
Reflections from Mulago, Nuvance Health, March 2022
Ethical Dilemmas in Global Health, Nuvance Health, March 2022
Challenging Moments in Global Health, Nuvance Health, March 2022

Personal Interests

25 full marathons and 1 full-distance Ironman
Avid guitar player
Youth basketball coach (YMCA)
Stage Actor (Bay Area Houston Ballet and Theatre); over 50 live performances

PubMed Indexed Medical Research Publications

As First Author

Lowe M, Okunlola O, Raza S, et al. (June 25, 2022) Radiofrequency Ablation as an Effective Long-Term Treatment for Chronic Sacroiliac Joint Pain: A Systematic Review of Randomized Controlled Trials. Cureus 14(6): e26327. DOI 10.7759/cureus.26327 (currently with 8 citations)

Lowe M, Bambhroliya Z, Patel H, et al. (April 23, 2023) Emerging Therapies for the Management of Pain and Vaso-Occlusive Crises in Patients With Sickle Cell Disease: A Systematic Review of Randomized Controlled Trials. Cureus 15(4): e38014. doi:10.7759/cureus.38014

As Corresponding Author

Sethia S, Batool T, Bambhroliya Z, et al. (July 31, 2023) Association Between Helicobacter pylori Infection and Migraine: A Systematic Review. Cureus 15(7): e42747. doi:10.7759/cureus.42747

Raza S, Osasan S, Sethia S, et al. (June 25, 2022) A Systematic Review of Sodium-Glucose Cotransporter 2 (SGLT2) Inhibitors and Sympathetic Nervous System Inhibition: An Underrated Mechanism of Cardiorenal Protection. Cureus 14(6): e26313. DOI 10.7759/cureus.26313 (currently with 9 citations)

Okunlola O, Raza S, Osasan S, et al. (June 30, 2022) Race/Ethnicity as a Risk Factor in the Development of Postpartum Hemorrhage: A Thorough Systematic Review of Disparity in the Relationship Between Pregnancy and the Rate of Postpartum Hemorrhage. Cureus 14(6): e26460. DOI 10.7759/cureus.26460

Bambhroliya Z, Sandrugu J, Lowe M, et al. (June 25, 2022) Diabetes, Polycystic Ovarian Syndrome, Obstructive Sleep Apnea, and Obesity: A Systematic Review and Important Emerging Themes. Cureus 14(6): e26325. DOI 10.7759/cureus.26325

Abstracts Presented at Conference

Combining multiple minimally invasive spinal surgical procedures into a single case, 6th Annual ASPN (American Society of Pain and Neuroscience, July 11-14, 2024, Miami Beach, FL) David M Joyce, DO, Michael Lowe, MD, Youmna DiStefano, MD, Robert E Jacobson, MD

Currently in Drafting

Working Title: A retrospective evaluation of BMI and clinical outcomes for patients receiving radiofrequency ablation to treat lumbar back pain across a nationwide healthcare and hospital system

Patent Literature Publications

Vibrating dental devices

WO EP US CN KR ES US9028250B2 Michael K. Lowe OrthoAccel Technologies, Inc.
Priority 2007-03-14 • Filed 2009-11-09 • Granted 2015-05-12 • Published 2015-05-12

Pulsatile orthodontic device

US US10449015B2 Michael K. Lowe OrthoAccel Technologies, Inc.
Priority 2007-03-14 • Filed 2017-11-01 • Granted 2019-10-22 • Published 2019-10-22

Massaging or brushing bite plates

US US9848959B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2007-07-05 • Filed 2014-05-30 • Granted 2017-12-26 • Published 2017-12-26

Laser orthodontic devices

WO US US9974630B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2012-04-13 • Filed 2013-04-12 • Granted 2018-05-22 • Published 2018-05-22

Electro-orthodontic device

US US9662183B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2012-07-18 • Filed 2013-07-16 • Granted 2017-05-30 • Published 2017-05-30

Pulsatile orthodontic device and methods

US US9700384B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2007-03-14 • Filed 2016-08-19 • Granted 2017-07-11 • Published 2017-07-11

Vibrating orthodontic remodeling device

US US8500446B2 Michael K. Lowe OrthoAccel Technologies Inc.

Priority 2007-03-14 • Filed 2012-11-22 • Granted 2013-08-06 • Published 2013-08-06

Vibrating orthodontic remodeling device

US US9943380B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2007-03-14 • Filed 2012-09-11 • Granted 2018-04-17 • Published 2018-04-17

Intra-oral vibrating orthodontic devices

US US20150173856A1 Michael K. Lowe OrthoAccel Technologies Inc.

Priority 2007-03-14 • Filed 2015-02-02 • Published 2015-06-25

Vibrating orthodontic remodeling device and method thereof

US US8939762B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2007-03-14 • Filed 2013-08-22 • Granted 2015-01-27 • Published 2015-01-27

Tooth positioner and vibrator combination

US US9968421B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2012-03-26 • Filed 2013-03-25 • Granted 2018-05-15 • Published 2018-05-15

Vibrating orthodontic strip

WO US CA US10039617B2 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2012-09-24 • Filed 2013-09-16 • Granted 2018-08-07 • Published 2018-08-07

Vibrating compressible dental plate for correcting malocclusion

WO US US20110136070A1 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2008-03-31 • Filed 2009-03-30 • Published 2011-06-09

Light cure bite plate for orthodontic remodeling devices

US US20140080082A1 Michael K. Lowe OrthoAccel Technologies Inc.

Priority 2012-09-14 • Filed 2013-08-14 • Published 2014-03-20

Fluoride releasing bite plate

US US20140242535A1 Michael K. Lowe OrthoAccel Technologies Inc.

Priority 2013-02-26 • Filed 2014-02-18 • Published 2014-08-28

Pulsatile orthodontic device and methods

US US20160184054A1 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2007-07-05 • Filed 2016-02-09 • Published 2016-06-30

Diagnostic mouthpieces

US US20170181675A9 Michael K. Lowe OrthoAccel Technologies Inc.

Priority 2013-03-13 • Filed 2014-07-11 • Published 2017-06-29

Nighttime orthodontics

US US10111729B1 Michael K Lowe OrthoAccel Technologies, Inc.

Priority 2007-03-14 • Filed 2016-07-20 • Granted 2018-10-30 • Published 2018-10-30

Orthodontic accelerator

US US9907626B1 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2007-03-14 • Filed 2016-01-13 • Granted 2018-03-06 • Published 2018-03-06

Improved orthodontic accelerator

AU AU2017204417A1 Michael K. Lowe OrthoAccel Technologies, Inc.

Priority 2017-06-28 • Filed 2017-06-28 • Published 2019-01-17

Improved orthodontic accelerator

EP EP3437585A1 Michael K Lowe OrthoAccel Technologies, Inc.

Priority 2017-08-02 • Filed 2017-08-02 • Published 2019-02-06

Improved orthodontic accelerator

JP JP2019013463A K Lowe Michael オルソアクセル テク ノ ロ ジーズ, インコーポレーテッド
OrthoAccel Technologies, Inc.

Priority 2017-07-07 • Filed 2017-07-07 • Published 2019-01-31