

Head and Neck Cancer Care in a Pandemic

Prioritizing Safe Care



Head and Neck Cancer Care in a Pandemic

Prioritizing Safe Care

EDITORS

Daniel G. Deschler
Harvard Medical School

Shaun A. Nguyen
Medical University of South Carolina

Babak Givi
New York University Grossman School of Medicine

Cherie-Ann O. Nathan
Louisiana State University Health Sciences Center Shreveport

Maie A. St. John
David Geffen School of Medicine at UCLA

Terry A. Day
Medical University of South Carolina

Christopher de Souza
Tata Memorial Hospital and Lilavati Hospital

PMPHUSA

NEW HAVEN, CONNECTICUT
CARY, NORTH CAROLINA

2020

PMPH USA, Ltd.
1160 Townsend Avenue
New Haven, CT 06512
Tel: +1 919-502-4220
Fax: +1 919-502-7673
info@pmphusa.com

PMPHUSA
Publishing to Advance
the Practice of Medicine

© 2020 PMPH USA, Ltd.

All rights reserved. Without limiting the rights under copyright reserved above, no part of this publication may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of the publisher.

20 21 22 23/KING/9 8 7 6 5 4 3 2 1

ISBN-13 978-1-60795-306-7

ISBN-10 1-60795-306-4

ePub-ISBN-13 978-1-60795-977-9

WebPDF-ISBN-13 978-1-60795-978-6

XML-ISBN-13 978-1-60795-987-8

Printed in the United States of America by King Printing.

Editor: Linda H. Mehta; Copyeditor/Typesetter: Manila Typesetting Company; Cover designer: Mary McKeon

Library of Congress Cataloging-in-Publication Data [to come: text as supplied by the LOC]

SALES AND DISTRIBUTION

CANADA

Login Canada

300 Saulteaux Crescent

Winnipeg, MB R3J 3T2

Canada

Tel: +1 800-665-1148

Fax: +1 800-665-0103

www.lb.ca

FOREIGN RIGHTS

John Scott & Company

International Publisher's Agency

P.O. Box 878

Kimberton, PA 19442 USA

Tel: +1 610-827-1640

Fax: +1 610-827-1671

rights@johnscottco.us

UNITED KINGDOM, EUROPE,
MIDDLE EAST, AFRICA,
SINGAPORE, THAILAND,
PHILIPPINES, INDONESIA,
VIETNAM, PACIFIC RIM, KOREA,
AUSTRALIA, NEW ZEALAND,
PAPUA NEW GUINEA, FIJI,
TONGA, SOLOMON ISLANDS,
COOK ISLANDS, MALAYSIA,
SOUTH AMERICA, CENTRAL
AMERICA

Eurospan Limited

Gray's Inn House

127 Clerkenwell Road

London EC1R 5DB, UK

Tel: +44(0)20 7845 0868

www.eurospanbookstore.com

INDIA, BANGLADESH, PAKISTAN,
SRI LANKA, NEPAL

Jaypee Brothers Medical Publishers Pvt. Ltd.

4838, 24 Ansari Road, Darya Ganj

New Delhi 110002, India

Tel: +91 11 23272143

Fax: +91 11 23276490

www.jaypeebrothers.com

PEOPLE'S REPUBLIC OF CHINA

People's Medical Publishing House

International Trade Department

No. 19, Pan Jia Yuan Nan Li

Chaoyang District

Beijing 100021, P.R. China

Tel: +86 10-67653342

Fax: +86 10-67691034

www.pmph.com

NOTICE: The authors and publisher have made every effort to ensure that the patient care recommended herein, including choice of drugs and drug dosages, is in accord with the accepted standard and practice at the time of publication. However, since research and regulation constantly change clinical standards, the reader is urged to check the product information sheet included in the package of each drug, which includes recommended doses, warnings, and contraindications. This is particularly important with new or infrequently used drugs. Any treatment regimen, particularly one involving medication, involves inherent risk that must be weighed on a case-by-case basis against the benefits anticipated. The reader is cautioned that the purpose of this book is to inform and enlighten; the information contained herein is not intended as, and should not be employed as, a substitute for individual diagnosis and treatment.

Contents

Foreword *ix*

Preface *xi*

Contributors *xiii*

SECTION 1 **General Considerations**

- 1** Epidemiology of COVID-19 and Its Relation to Head and Neck Cancer Patients by Young Jae Byun, Daniel T. Lackland, Shaun A. Nguyen **3**
- 2** Health System Approaches to COVID-19 Patients and the Impact on Head and Neck Cancer Care by Michael Au, John Kim, Jonathan C. Irish **13**
- 3** Definitions of Protective Equipment and Venues and General Recommendations for Use by Brooke M. Su-Velez, Tom Maxim, Jennifer L. Long, Maie A. St. John, Michael A. Holliday **39**
- 4** Telemedicine and the Head and Neck Cancer Patient—How to Optimize Care by Priyanka D. Reddy, Flora Yan, Brian A. Moore, Cherie-Ann O. Nathan **55**
- 5** The Impact of COVID-19 Infection on Outcomes by Neil K. Mehta, Kristen A. Echanique, Maie A. St. John **65**
- 6** Lessons Learned During the COVID-19 Virus Pandemic by Albert Y. Han, Jessa E. Miller, Jennifer L. Long, David A. Rapkin, Charlene L. Williams, Roger Dafter, Dinesh K. Chhetri, Maie A. St. John, Travis L. Shiba **77**
- 7** Ethical Considerations in Prioritizing Pandemic-Era Cancer Care by Nithin S. Peddireddy, Catherine T. Haring, Andrew G. Shuman **95**

SECTION 2 Patient Management Considerations

- 8** Outpatient Procedures, Endoscopy, and Modifications During a Pandemic by Lindsey Moses, Babak Givi **105**
- 9** Alternative and Innovative Multidisciplinary Management Approaches to Head and Neck Cancer During a Pandemic by Seerat K. Poonia, Donald T. Weed, Ara A. Chalian **121**
- 10** Safety Recommendations for Evaluation and Surgery of the Head and Neck During the COVID-19 Pandemic by Janine M. Rotsides, Emily Kamen, Ameya A. Asarkar, Babak Givi **137**
- 11** Surgical Considerations for Tracheotomy During the COVID-19 Pandemic by Yew Song Cheng, Lindsey Moses, Babak Givi **157**
- 12** SARS-CoV-2 Testing: Methods and Timing in Care of Patients by Priyanka D. Reddy, David M. Andrews, Donald T. Weed **169**

SECTION 3 Subsite-Specific Considerations (Mucosal)

- 13** Sinonasal and Nasopharyngeal: Mucosal Subsite Considerations by Michael T. Yim, Ehab Y. Hanna **183**
- 14** Oral Cavity: Mucosal Subsite Considerations by Joseph Zenga, Jennifer Gross, Sidharth V. Puram **189**
- 15** Oropharynx by Brent A. Chang, Ameya A. Asarkar, Cherie-Ann O. Nathan **203**
- 16** Larynx and Hypopharynx by Max Hennessy, Karen Choi, Neerav Goyal **217**

SECTION 4 Subsite-Specific Considerations (Nonmucosal)

- 17** Thyroid and Parathyroid Endocrine Surgery Care in the COVID Pandemic by Marika D. Russell, Amanda Silver Karcioglu, Dipti Kamani, Gregory W. Randolph **231**

- 18 Salivary Gland** by Ramez Philips, David M. Cognetti **247**
- 19 Cutaneous Malignancy** by Kevin Emerick **259**
- 20 Lymphoma: Nonmucosal Subsite Considerations** by Vincent M. Desiato, Ernest Gomez, Thorsen W. Haugen, Scharukh Jalisi **275**
- 21 Management of Nonmalignant Head and Neck Disease**
by Kristen A. Echanique, Shabnam Ghazizadeh, Rhorie P. R. Kerr, Keith Blackwell, Maie St. John, Vishad Nabili, Irene Kim **283**

SECTION 5 **Education in the COVID-19 Era**

- 22 Patient Education** by Michael G. Moore, Carole Fakhry **307**
- 23 Medical Student, Resident, and Fellow Education** by Jenny X. Chen, Alice Z. Maxfield, Regan W. Bergmark, Stacey T. Gray **315**
- 24 Continuing Medical Education, Peer Education, and the Role of Professional Societies**
by Cecelia E. Schmalbach, Vivian F. Wu **323**

SECTION 6 **Social Issues in the COVID-19 Era**

- 25 Dying Differently During a Pandemic: Communication, Stigma, and Bereavement** by Alyssa K. Ovaitt, Susan McCammon **335**
- 26 Impact on the Healthcare Workforce** by Flora Yan, Brittany N. Tillman, Lenka Stankova, Andrew T. Day **349**
- 27 An International Perspective: Commentary from Front-Line Specialists in India During a Pandemic** by Rosemarie de Souza, Erick Yuen, Christopher de Souza **361**

Index **369**

Foreword

I would like to express my admiration and appreciation for the remarkable head and neck cancer surgeons who have so rapidly created this timely and highly relevant book on caring for head and neck cancer patients during the COVID pandemic. These authors represent the best of our field, and their selflessness in devoting time and energy to this text speaks to their generosity. The lessons we have learned, and are learning, about adapting our care for COVID patients are critical to disseminate quickly.

As a head and neck surgeon, I have always been focused on how cancer care is delivered. But in March of 2020, I became a COVID patient. I initially shrugged it off, thinking that I would treat it like a flu. Much to my chagrin, my course of illness was much more severe, as I was hospitalized for 10 days. I have shared my extended course of recovery [“The Worst Patientm,” *JAMA Oto*, published online, August 20, 2020; doi:10.1001/jamaoto.2020.2435], but I also want to make it clear that I understand that I am absolutely one of the lucky ones. During the early period when I was admitted, the mortality rate of our COVID inpatients was 9%, and I will be forever grateful that I have made it back.

I am also a little wiser. It turns out diseases other than cancers of the oral cavity and

pharynx and larynx are lethal! For those who wonder whether we were right to delay care for a bit in the spring of this year, as we tried to figure out how to respond to the epidemic, I will say that the thoughtfulness was worth it. We have learned so much about COVID in this time. My 86-year-old mother contracted COVID from her assisted living facility and was admitted to the same facility where I had been discharged two weeks before. We expected the worst. But she made it out in six days—faster than me—and I personally witnessed the tremendous **improvement care** that she received. From my upfront seat, it seemed like years of progress had been made in those two weeks. Had the timing of our hospitalizations been reversed, she may not have made it.

And that is the reason for this book. The tremendous acceleration and accumulation of what we now know has been summarized elegantly in this volume. I know most surgeons will focus on the surgical chapters, but I hope you will also carefully consider the chapters on COVID’s educational and social impact. I appreciate what it is like to be constantly worried about infecting the doctors and nurses and therapists who risk their well-being to care for you. I empathize with what it is like to be a deteriorating patient with a newly discovered disease, without a curriculum of study to

guide understanding. And I understand what it is like to be ill, without family allowed to visit or to comfort, and for your family to be completely in the dark about the fate of their loved one. Going through a serious disease like this will do that for you. The supportive treatments

that complement anti-neoplastic care allow us to take care of the whole patient and family and allow us to become better physicians.

In gratitude,
Bevan Yueh

Preface

The Editors

It is unusual to write a book in the midst of an event like the COVID-19 pandemic that we are experiencing just now, even though the end is nowhere in sight.

This book, however, is written in the context of cancers of the head and neck and how the pandemic impacts the treatment and care of these patients who are suffering from malignancies. Cancers continuously and steadily advance and spread. While we wait for definitive treatments for COVID-19, such as vaccination, we cannot delay or defer treatments for cancers. Every delay can prove costly. What is operable and treatable today might become inoperable and untreatable if we delay treatment. Patients with cancers are thought to be immunocompromised and, thus, are vulnerable to infection. The cause of COVID-19, SARS-CoV-2, has proven to be extraordinarily contagious and can afflict the body's system in numerous ways, impeding the delivery of time-dependent, important, and much needed treatment. The dilemma lies in situations, such as when a patient suffering from head and neck cancer is simultaneously struck with COVID-19. Many differing situations can present themselves, and the treating physician needs to decide which problem gains precedence in priority and when to intervene with treatment directed at addressing cancer.

The patient who suffers from cancer may also present with comorbidities that may further complicate treatment. In addition, the patient may require modalities like radiation and chemotherapy in the course of their treatment. All these complexities need to be given careful consideration when working during the raging COVID pandemic.

Many of us are searching for answers while we simultaneously deal with the SARS-CoV-2. How do we deliver safe, effective, and comprehensive treatment to patients who suffer from cancer while simultaneously dealing with the COVID-19 that is in our midst? Inventiveness, teamwork, and thoughtful planning are required. All of us owe our patients this much. This book is an attempt to address all these complex issues involving decision-making and shared experience and knowledge so that those combating these problems on multiple fronts can use this as a compass to chart a course for the treatment of their patients.

We humbly acknowledge that there are many questions that still need to be answered. Our book is dedicated to all those brave and selfless men and women, healthcare givers and healthcare receivers, and their families who have been directly affected by this pandemic. We also thank the individuals and the numerous organizations from all over the world who

have donated generously towards the safety and comfort of all the healthcare workers on the frontlines. We hope that this book does indeed make a beneficial difference in the lives

of our patients and in the lives of those who have dedicated their days and nights to caring for others, even in times of pandemic.

Contributors

David M. Andrews, MD [12]

Associate Professor
Department of Pathology and Laboratory Medicine
University of Miami Miller School of Medicine
Miami, Florida

Ameya A. Asarkar, MD [10, 15]

Assistant Professor
Department of Otolaryngology / Head and Neck
Surgery
Louisiana University Health Sciences Center &
Feist-Weiller Cancer Center
Staff Physician
Department of Surgery
Otolaryngology Section
Overton Brooks Veterans Affairs Medical Center
Shreveport, Louisiana

Michael Au, MD, FRCSC [2]

Fellow in Head & Neck Surgical Oncology and
Microvascular Reconstructive Surgery
Department of Otolaryngology-Head and Neck
Surgery
University of Toronto
Toronto, Ontario, Canada

Regan W. Bergmark, MD [23]

Instructor in Otolaryngology - Head and Neck
Surgery
Harvard Medical School
Division of Otolaryngology - Head and Neck
Surgery
Patient Reported Outcomes, Value and Experience
(PROVE) Center
Brigham and Women's Hospital
Boston, Massachusetts

Keith Blackwell, MD [21]

Professor and Fellowship Co-Director
Division of Facial Plastic and Reconstructive
Surgery
Department of Head and Neck Surgery
University of California, Los Angeles Medical
Center
Department of Head and Neck Surgery
David Geffen School of Medicine at UCLA
Los Angeles, California

Young Jae Byun, MD [1]

Resident, Otolaryngology - Head and Neck Surgery
University of South Florida
Tampa, Florida

Ara A. Chalian, MD [9]

Professor of Otorhinolaryngology: Head and Neck
Surgery
Director, Facial Plastic Surgery
The Hospital of the University of Pennsylvania
Philadelphia, Pennsylvania

Brent A. Chang, MD, FRCSC [15]

Assistant Professor
Department of Otolaryngology / Head and Neck
Surgery
Louisiana University Health Sciences Center &
Feist-Weiller Cancer Center
Shreveport, Louisiana

Jenny X. Chen, MD [23]

Resident, Otolaryngology - Head and Neck Surgery
Harvard Medical School
Massachusetts Eye and Ear
Boston, Massachusetts

Yew Song Cheng, BM, BCh [11]

Resident, Otolaryngology - Head and Neck Surgery
New York University Medical Center
New York, New York

Dinesh K. Chhetri, MD [6]

Professor of Head and Neck Surgery
David Geffen School of Medicine at UCLA
UCLA Head and Neck Cancer Program
UCLA Medical Center
Los Angeles, California

Karen Choi, MD [16]

Assistant Professor
Department of Otolaryngology - Head and Neck Surgery
The Pennsylvania State University
College of Medicine
Hershey, Pennsylvania

David M. Coggnetti, MD [18]

Associate Professor and Chair
Department of Otolaryngology - Head and Neck Surgery
Thomas Jefferson University Hospitals
Philadelphia, Pennsylvania

Roger Dafter, PhD [6]

Associate Director, Mind-Body Medicine Group
Department of Head and Neck Surgery
Clinical and Health Psychologist
David Geffen School of Medicine at UCLA
UCLA Head and Neck Cancer Program
UCLA Medical Center
Los Angeles, California

Terry A. Day, MD [Ed]

Professor, Vice Chair, and Director
Division of Head and Neck Oncologic Surgery
Department of Otolaryngology - Head and Neck Surgery
Director, Head and Neck Tumor Center
Hollings Cancer Center
Medical University of South Carolina
Charleston, South Carolina

Andrew T. Day, MD, MPH [26]

Assistant Professor of Otolaryngology - Head and Neck Surgery
University of Texas Southwestern Medical Center
Dallas, Texas

Vincent M. Desiato, DO [20]

Clinical Research Fellow
Department of Otolaryngology - Head and Neck Surgery
Medical University of South Carolina
Charleston, South Carolina
Resident Physician
Department of Otolaryngology - Head and Neck Surgery
Geisinger Medical Center
Danville, Pennsylvania

Daniel G. Deschler, MD, FACS [Ed]

Vice Chair for Academic Affairs
Massachusetts Eye and Ear Infirmary
Department of Otolaryngology - Head and Neck Surgery
Harvard Medical School
Boston, Massachusetts

Christopher de Souza, MS, DORL, DNB, FACS (USA), FRCS (England) [Ed, 27]

ENT Consultant, Tata Memorial Hospital
Lilavati Hospital
Mumbai, Maharashtra, India

Rosemarie de Souza, MD [27]

Professor of Medicine
In Charge of Medical Intensive Care Unit
Nair Hospital
Mumbai, Maharashtra, India

Kristen A. Echanique, MD [5, 21]

Resident Physician, Department of Head and Neck Surgery
University of California, Los Angeles
Los Angeles, California

Kevin Emerick, MD [19]

Assistant Professor, Otolaryngology - Head and Neck Surgery

Harvard Medical School
 Co-director, Multidisciplinary Cutaneous Oncology
 Center
 Massachusetts Eye and Ear Infirmary
 Division of Head and Neck Surgery
 Boston, Massachusetts

Carole Fakhry, MD, MPH [22]
 Director, Johns Hopkins Head and Neck Cancer
 Center
 Professor of Otolaryngology -
 Johns Hopkins School of Medicine
 Baltimore, Maryland

Shabnam Ghazizadeh, MD [21]
 Resident, Department of Head and Neck Surgery
 University of California, Los Angeles Medical
 Center
 Los Angeles, California

Babak Givi, MD [Ed, 8, 10, 11]
 Associate Professor
 Department of Otolaryngology - Head and Neck
 Surgery
 NYU Langone Health
 New York, New York

Ernest Gomez, MD, MTR [20]
 Attending Physician
 Division of Otolaryngology - Head and Neck
 Surgery
 Department of Surgery
 Beth Israel Deaconess Medical Center
 Department of Otolaryngology - Head and Neck
 Surgery
 Harvard Medical School
 Boston, Massachusetts

Neerav Goyal, MD, MPH, FACS [16]
 Associate Professor of Otolaryngology - Head and
 Neck Surgery, Surgery, Neurosurgery, and Public
 Health Sciences
 Chief, Division of Head and Neck Oncology and
 Surgery
 Associate Director, Skull Base and Pituitary Center
 Department of Otolaryngology - Head and Neck
 Surgery

Penn State University College of Medicine
 Penn State Cancer Institute
 Hershey, Pennsylvania

Stacey T. Gray, MD [23]
 Associate Professor
 Department of Otolaryngology - Head and Neck
 Surgery
 Harvard Medical School
 Massachusetts Eye and Ear
 Boston, Massachusetts

Jennifer Gross, MD [14]
 Assistant Professor
 Department of Otolaryngology - Head and Neck
 Surgery
 Emory University School of Medicine
 Atlanta, Georgia

Albert Y. Han, MD, PhD [6]
 Resident Physician, Department of Head and Neck
 Surgery
 David Geffen School of Medicine at UCLA
 Los Angeles, California

Ehab Y. Hanna, MD, FACS [13]
 Professor and Vice Chairman, Director of Skull Base
 Surgery
 Department of Head and Neck Surgery
 Medical Director, Head and Neck Center
 University of Texas, MD Anderson Cancer Center
 Houston, Texas

Catherine T. Haring, MD [7]
 Department of Otolaryngology, Head and Neck
 Surgery
 University of Michigan Medical School
 Ann Arbor, Michigan

Thorsen W. Haugen, MD [20]
 Attending Physician, Department of Otolaryngology
 - Head and Neck Surgery
 Geisinger Medical Center
 Danville, Pennsylvania
 Assistant Professor, Geisinger Commonwealth
 School of Medicine
 Scranton, Pennsylvania

Max Hennessy, MD [16]

Resident Physician, Department of Otolaryngology
- Head and Neck Surgery
The Pennsylvania State University
College of Medicine
Hershey, Pennsylvania

Michael A. Holliday, MD [3]

Program Director, Department of Head and Neck
Surgery
UCLA David Geffen School of Medicine
University of California, Los Angeles
Los Angeles, California

Jonathan C. Irish, MD, MSc, FRCS, FACS [2]

Provincial Head, Surgical Oncology Program
Ontario Health (Cancer Care Ontario)
The Kevin and Sandra Sullivan Chair in Surgical
Oncology
Head, Division of Head and Neck Oncology and
Reconstructive Surgery
Professor, Department of Otolaryngology - Head
and Neck Surgery
University of Toronto
Toronto, Ontario, Canada

Scharukh Jalisi, MD, MA [20]

Chief, Otolaryngology - Head and Neck Surgery
Beth Israel Deaconess Medical Center
Department of Otolaryngology - Head and Neck
Surgery
Harvard Medical School
Boston, Massachusetts

Dipti Kamani, MD [17]

Clinical Research Specialist
Division of Thyroid and Parathyroid Surgery
Department of Otolaryngology
Massachusetts Eye and Ear Infirmary
Harvard Medical School
Boston, Massachusetts

Emily Kamen, MD [10]

Resident
Department of Otolaryngology - Head and Neck
Surgery
NYU Langone Health
New York, New York

Amanda Silver Karcioglu, MD [17]

Division of Otolaryngology - Head and Neck
Surgery
Department of Surgery
NorthShore University HealthSystem
Evanston, Illinois
Clinical Educator
Pritzker School of Medicine
University of Chicago
Chicago, Illinois

Rhorie P. R. Kerr, MD [21]

Assistant-Professor-in-Residence
Facial Plastic and Reconstructive Surgery
Department of Head and Neck Surgery
University of California, Los Angeles
Los Angeles, California

Irene Kim, MBA, MD [21]

Assistant-Professor-in-Residence
Director, Facial Nerve Center
Facial Plastic and Reconstructive Surgery
Department of Head and Neck Surgery
University of California, Los Angeles
Los Angeles, California

John Kim, MD, FRCPC [2]

Associate Professor, Department of Radiation
Oncology
University of Toronto
Deputy Chief, Radiation Medicine Program
Radiation Oncologist
Princess Margaret Cancer Centre/University
Health Network
Ontario Head and Neck Cancers Lead
Ontario Health (Cancer Care Ontario)
Toronto, Ontario, Canada

Daniel T. Lackland, DrPH [1]

Professor of Epidemiology
Department of Neurology
Medical University of South Carolina
Charleston, South Carolina

Jennifer L. Long, MD, PhD [3, 6]

Assistant Professor
Department of Head and Neck Surgery
David Geffen School of Medicine

University of California, Los Angeles (UCLA)
Greater Los Angeles Veterans Administration
Healthcare System
Los Angeles, California

Alice Z. Maxfield, MD [23]

Instructor, Division of Otolaryngology
Brigham and Women's Hospital
Department of Otolaryngology
Harvard Medical School
Boston, Massachusetts

Tom Maxim, MD [3]

Resident, Department of Head and Neck Surgery
David Geffen School of Medicine at University of
California
Jonsson Comprehensive Cancer Center
UCLA Head and Neck Cancer Program
UCLA Medical Center
Greater Los Angeles VA Healthcare System
Los Angeles (UCLA)
Los Angeles, California

Susan McCammon, MFA, MD, FACS [25]

Professor, Department of Otolaryngology - Head
and Neck Surgery
Professor, Department of Internal Medicine
Division of Gerontology, Geriatrics, and Palliative
Care
Assistant Director, Community-Based Palliative
Care
UAB Center for Palliative and Supportive Care
The University of Alabama at Birmingham
Birmingham, Alabama

Neil K. Mehta, BS [5]

MD Candidate Class of 2022
Wayne State University School of Medicine
Detroit, Michigan

Jessa E. Miller, MD [6]

Resident, Department of Head and Neck Surgery
David Geffen School of Medicine at UCLA
Los Angeles, California

Brian A. Moore, MD, FACS [4]

Director, Ochsner Cancer Institute

Chairman, Otolaryngology, Head and Neck Surgical
Oncology
Tulane University School of Medicine
New Orleans, Louisiana

Michael G. Moore, MD [22]

Arilla Spence DeVault Professor and Vice Chair of
Academic Affairs
Department of Otolaryngology - Head and Neck
Surgery
Indiana University School of Medicine
Medical Director
IUH Joe & Shelly Schwarz Cancer Center
Indianapolis, Indiana

Lindsey Moses, MD [8, 11]

Resident, Otolaryngology - Head and Neck Surgery
NYU Langone Health
New York, New York

Vishad Nabili, MD [21]

Professor of Clinical Head and Neck Surgery
Division of Facial Plastic and Reconstructive
Surgery
Department of Head and Neck Surgery
University of California, Los Angeles Medical
Center
Los Angeles, California

Cherie-Ann O. Nathan, MD, FACS [Ed, 4, 15]

Chair and Professor
Department of Otolaryngology - Head and Neck
Surgery
Shreveport, Louisiana

Shaun A. Nguyen, MD [Ed, 1]

Professor, Director, and Clinical Resident
Department of Otolaryngology - Head and Neck
Surgery
Medical University of South Carolina
Charleston, South Carolina

Alyssa K. Ovaith, MD [25]

Department of Otolaryngology - Head and Neck
Surgery
The University of Alabama at Birmingham
Birmingham, Alabama

Nithin S. Peddireddy, MD [7]

Resident, Department of Otolaryngology, Head and Neck Surgery
University of Michigan Medical School
Ann Arbor, Michigan

Ramez Philips, MD [18]

Resident, Department of Otolaryngology - Head and Neck Surgery
Thomas Jefferson University Hospitals
Philadelphia, Pennsylvania

Seerat K. Poonia, MD [9]

Resident, Department of Otolaryngology - Head and Neck Surgery
Hospital of the University of Pennsylvania
Philadelphia, Pennsylvania

Sidharth V. Puram, MD, PhD [14]

Assistant Professor
Department of Otolaryngology - Head and Neck Surgery
Washington University School of Medicine
Saint Louis, Missouri

Gregory W. Randolph, MD, FEBS (Endocrine), FACS, FACE [17]

Professor of Otolaryngology - Head and Neck Surgery
Clair and John Bertucci Endowed Chair in Thyroid Surgical Oncology
Director, Thyroid/Parathyroid Endocrine Surgical Division
Massachusetts Eye and Ear Infirmary
Member, Endocrine Surgical Service
Massachusetts General Hospital
Harvard Medical School
Boston, Massachusetts

David A. Rapkin, PhD [6]

Assistant Clinical Professor
Department of Head and Neck Surgery
David Geffen School of Medicine at UCLA
UCLA Head and Neck Cancer Program
UCLA Medical Center
Los Angeles, California

Priyanka D. Reddy, BA [4, 12]

M.D. Candidate, Class of 2021
Department of Otolaryngology - Head and Neck Surgery
Medical University of South Carolina
Charleston, South Carolina

Janine M. Rotsides, MD [10]

Resident, Otolaryngology - Head and Neck Surgery
NYU Langone Health
New York, New York

Marika D. Russell, MD, FACS [17]

Associate Professor
Division of Head and Neck Oncologic and Endocrine Surgery
Department of Otolaryngology - Head and Neck Surgery
University of California, San Francisco
San Francisco, California

Cecelia E. Schmalbach, MD, MSc, FACS [24]

David Myers, MD, Professor & Chair
Department of Otolaryngology - Head and Neck Surgery
Director, Head & Neck Institute
Lewis Katz School of Medicine
Temple University
Philadelphia, Pennsylvania

Travis L. Shiba, MD [6]

Assistant Professor, Department of Head and Neck Surgery
David Geffen School of Medicine at UCLA
UCLA Head and Neck Cancer Program
UCLA Medical Center
Los Angeles, California

Andrew G. Shuman, MD, FACS [7]

Assistant Professor
Department of Otolaryngology, Head & Neck Surgery
Center for Bioethics and Social Sciences in Medicine
University of Michigan Medical School
Ann Arbor, Michigan

Lenka Stankova, MD [26]

Assistant Professor
 Department of Otolaryngology - Head and Neck
 Surgery
 University of Texas Southwestern Medical Center
 Dallas, Texas

Maie A. St. John, MD, PhD, FACS [Ed, 3, 5, 6, 21]

Professor and Chair
 Thomas A. Calcaterra Chair in Head and Neck
 Surgery
 Co-director, UCLA Head and Neck Cancer
 Program
 Jonsson Comprehensive Cancer Center
 David Geffen School of Medicine at UCLA
 Los Angeles, California

Brooke M. Su-Velez, MD, MPH [3]

Resident Physician
 Department of Head and Neck Surgery
 David Geffen School of Medicine at University of
 California
 Los Angeles (UCLA)
 Los Angeles, California

Brittney N. Tillman, MD [26]

Assistant Professor
 Department of Otolaryngology - Head and Neck
 Surgery
 University of Texas Southwestern Medical Center
 Dallas, Texas

Donald T. Weed, MD, FACS [9, 12]

W. Jarrard Goodwin Professor
 Department of Otolaryngology
 Sylvester Comprehensive Cancer Center
 University of Miami Miller School of Medicine
 Miami, Florida

Charlene L. Williams, PhD [6]

Clinical Programs Director
 Department of Head and Neck Surgery
 David Geffen School of Medicine at UCLA
 UCLA Head and Neck Cancer Program
 UCLA Medical Center
 Los Angeles, California

Vivian F. Wu, MD, MPH [24]

Senior Staff Surgeon
 Department of Otolaryngology - HNS
 Henry Ford Health System
 Clinical Assistant Professor
 Wayne State University School of Medicine
 Detroit, Michigan

Flora Yan, BA [4, 26]

Department of Otolaryngology - Head and Neck
 Surgery
 Medical University of South Carolina
 Charleston, South Carolina

Michael T. Yim, MD [13]

Assistant Professor
 Department of Otolaryngology - Head and Neck
 Surgery
 Rhinology and Skull Base Surgery
 Louisiana State University Health - Shreveport
 Shreveport, Louisiana

Bevan Yueh, MD, MPH [Foreword]

President of the Association of Academic
 Departments of Otolaryngology
 Professor and George L. Adams Chair for
 Otolaryngology
 Department of Otolaryngology, Head and Neck
 Surgery
 University of Minnesota Medical School
 Minneapolis, Minnesota

Erick Yuen, BA [27]

Clinical Research Fellow
 Department of Otolaryngology - Head & Neck
 Surgery
 Medical University of South Carolina
 Charleston, South Carolina

Joseph Zenga, MD [14]

Assistant Professor
 Department of Otolaryngology
 Division Director Head and Neck Surgical Oncology
 and Reconstruction
 Medical College of Wisconsin
 Milwaukee, Wisconsin

