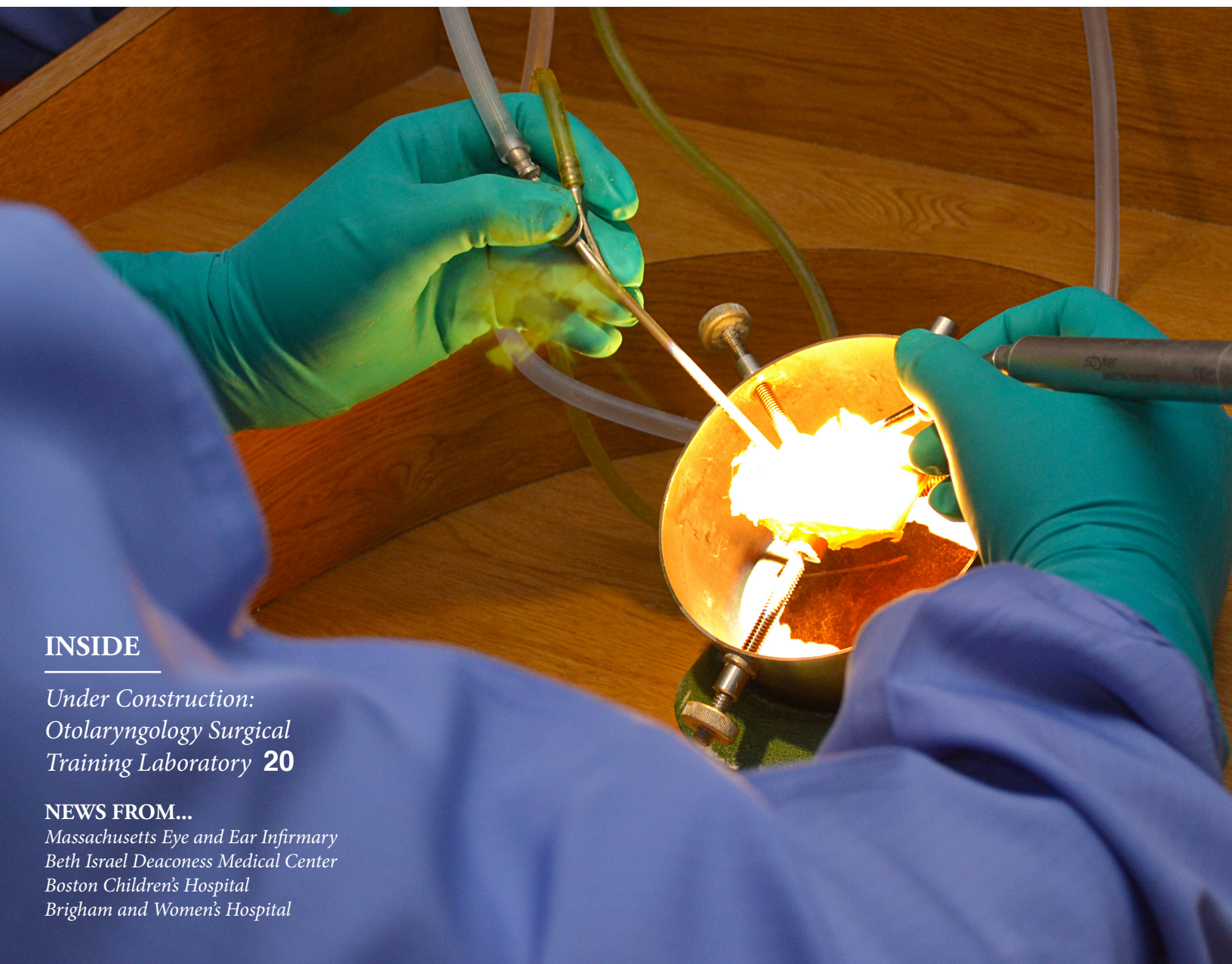


HARVARD

*An annual update from the
Department of Otology and Laryngology
at Harvard Medical School.*

Otolaryngology



INSIDE

*Under Construction:
Otolaryngology Surgical
Training Laboratory* **20**

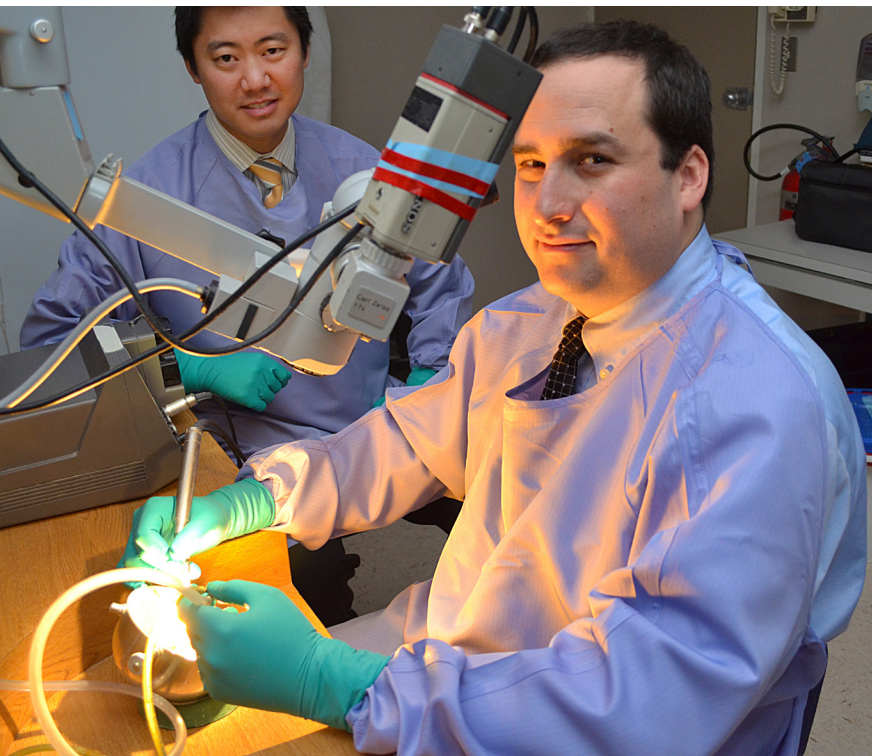
NEWS FROM...

*Massachusetts Eye and Ear Infirmary
Beth Israel Deaconess Medical Center
Boston Children's Hospital
Brigham and Women's Hospital*

HARVARD

An annual update from the
Department of Otology and Laryngology
at Harvard Medical School.

Otolaryngology



Above: David Jung, M.D., Ph.D., and Aaron Tward, M.D., Ph.D.

On the cover: Temporal Bone Dissection with Aaron Tward, M.D., Ph.D.

Photos by Garyfallia Pagonis.

contents

- 1 Letter from the Chairman**
Joseph B. Nadol, Jr., M.D.
- 2 Advances in Otolaryngology Residency Training**
Stacey T. Gray, M.D., F.A.C.S.
- 4 Beth Israel Deaconess Medical Center News**
Robert A. Frankenthaler, M.D.
- 6 Boston Children's Hospital News**
Michael J. Cunningham, M.D., F.A.C.S.
- 10 Brigham and Women's Hospital News**
Jo Shapiro, M.D.
- 12 Massachusetts Eye and Ear Infirmary News**
Joseph B. Nadol, Jr., M.D.
- 18 Alumni News**
- 20 Under Construction: ORL Surgical Training Lab**
- 24 Graduation**
- 26 Promotions**
- 28 In Memoriam: Saumil N. Merchant, M.D.**

HARVARD *Otolaryngology*

An annual update from the alumni and staff of the Department of Otology and Laryngology at Harvard Medical School.

Please send comments, requests for additional copies, and other inquiries regarding this issue to:

Suzanne Day
Publications Manager
Department of Otolaryngology
Massachusetts Eye and Ear Infirmary
243 Charles Street, Boston, Mass. 02114
617-573-3897 | suzanne_day@meei.harvard.edu

Contributors

Editor Suzanne Day

Design/Layout Suzanne Day

Photography Garyfallia Pagonis

Contributing Writers

Joseph B. Nadol, Jr., M.D.
Stacey T. Gray, M.D., F.A.C.S.
Robert A. Frankenthaler, M.D.
Michael J. Cunningham, M.D., F.A.C.S.
Jo Shapiro, M.D.

December 2012 | Issue 8

Dear Readers,

In this issue of *Harvard Otolaryngology*, we celebrate what has been accomplished this year, both individually and collectively, in the Department of Otolaryngology at Harvard Medical School. Our clinical venues continue to evolve at Beth Israel Deaconess Medical Center, Boston Children's Hospital, Brigham and Women's Hospital, Massachusetts General Hospital, and Massachusetts Eye and Ear Infirmary, united in our mission to promote excellence in clinical care, research, and teaching in the field of otolaryngology.

As you may know, I have asked that a search commence for my successor as Chief of the Department of Otolaryngology at Massachusetts Eye and Ear Infirmary and Massachusetts General Hospital and Chairman of the Department of Otolaryngology at Harvard Medical School. This is done with a spirit of pride in what has been accomplished in the Department over the last 25 years and with the conviction that the time has come for new leadership.

I will continue to work in my present capacity until my successor has been identified and arrives. Following that, I will continue to practice otology, while devoting much of my time to research, particularly histopathology of the human temporal bone and the teaching commitments that this entails.

I am pleased to look back at the remarkable accomplishments of the Department and to celebrate those that transpired over the past year in this issue. With gratitude, I thank Dr. Gray for her editorial on educational activities, and Drs. Frankenthaler, Cunningham, and Shapiro for providing updates of ongoing activity in otolaryngology services at Beth Israel Deaconess Medical Center, Boston Children's Hospital, and Brigham and Women's Hospital.

In this issue, we also report on faculty promotions, our latest graduation ceremony for the class of 2012, and news from our alumni of the program. Our much-anticipated state-of-the-art Otolaryngology Surgical Training Laboratory, which will open in January, is also featured.

I'd like to take this opportunity to thank you for your interest in and support of the Department's activities.

Sincerely,

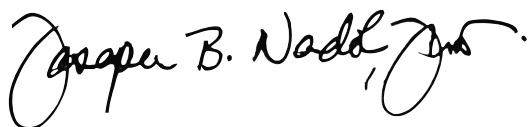


Photo by Garyfallia Pagonis.

Joseph B. Nadol, Jr., M.D.

Walter Augustus LeCompte Professor
Department of Otolaryngology
Harvard Medical School

Chief and Chairman
Department of Otolaryngology
Massachusetts Eye and Ear Infirmary
Massachusetts General Hospital

Advances in Otolaryngology Residency Training

by STACEY T. GRAY, M.D., F.A.C.S.



Photo by Garyfallia Pagonis.

Every fall, our program reviews more than 350 applications from extremely well qualified fourth year medical students from across the country that want to pursue training in otolaryngology. By Match Day in the spring, that number has been narrowed down to four or five applicants that we feel will flourish in our program. These students come with top-notch qualifications, impeccable academic records, enviable research skills, and extraordinary life experiences. Despite these accolades, they enter residency with undeveloped potential, and our task is to provide them with the opportunity to complete training, with the skills required to make a significant contribution to the field of Otolaryngology–Head and Neck Surgery.

Our program offers a unique educational experience that provides optimal exposure to all facets of otolaryngology. Residents are exposed to several different institutional settings during their clinical training – a dedicated ORL specialty hospital (MEEI), a world-renowned pediatric hospital (BCH), and three large tertiary care centers (MGH, BWH, and BIDMC). This exposure offers them the opportunity to see how care is delivered in a variety of hospital systems. They gain experience in every subspecialty of otolaryngology within each of these separate institutions. They acquire medical knowledge and patient care skills directly from experts and leaders in the field. In addition to clinical training, six months of the program are dedicated to research, so that they will leave residency with a firm understanding of the science and research upon which our specialty is built. Each resident is responsible for initiating and completing a FOCUS research project, which they have the opportunity to present to the faculty just prior to graduation.

Our residents' clinical and research experience is entirely dependent upon the dedication of the staff of the Harvard

Otolaryngology Program. I'd like to take this opportunity to thank them for all of the hours spent teaching in the clinic and the operating room, directing conferences, delivering lectures, and mentoring research projects. There are many physicians who also contribute regularly to the formal educational program at our institution, and they are listed herein. This includes associate residency directors, members of the Education Committee, the Curriculum Committee, resident research mentors and clinical advisors.

Our formal didactic educational program is constantly evolving and maturing. We continue to have weekly grand rounds, attended by faculty and residents, followed by a didactic session led by the residents. Last year, we were fortunate to bolster our program with several visiting professors. Ehab Y. Hanna, M.D., F.A.C.S., from MD Anderson Cancer Center spoke on "Sinonasal Malignancies: Progress, challenges, and future directions," and Bradford A. Woodworth, M.D. from the University of Alabama at Birmingham reviewed his research on "the acquired apical C channel deficiency: a new model in the pathogenesis of chronic rhinosinusitis." This year, several of our cadaveric dissection courses have been modified. The Endoscopic Sinus Cadaver Course, directed by **Benjamin S. Bleier, M.D.**, has been expanded and will be attended not only by the Harvard PGY-2 and PGY-5 residents, but also by ORL residents from Tufts University and Boston University. We eagerly anticipate the completion of construction of the new ORL Surgical Training Laboratory at MEEI this winter, which will allow a significant improvement in our hands-on cadaveric

training for residents. **Jennifer L. Smullen, M.D.**, who directs the Temporal Bone Dissection Course, will take advantage of the new space and expand the temporal bone course. Historically this course was attended only by the PGY-2 residents, but with the added space, more senior residents will be able to take advantage of this opportunity.

Ultimately the success of any program is judged by the continued success of its residents. They continue to set an extremely high standard for what can be accomplished during their residency years. During the last academic year, our residents contributed over 40 publications to the ORL literature. At the 2011 AAO-HNS annual meeting in San Francisco, our residents were responsible for eight presentations. Seven residents presented at the scientific session of COSM 2012 in San Diego. Residents presented at the annual ARO and NASBS meetings as well. In addition to research activities, our residents

remain involved in a variety of projects that contribute to other aspects of otolaryngology, locally, nationally, and even internationally. They seek out opportunities to be involved

at their home institutions, such as refining the new computer order entry system recently implemented at MEEI. A group of residents has embarked on the creation of a series of board-style review questions for the *New England Journal of Medicine*. On an international front, residents participate in global surgical mission trips. This year, **Dunia Abdul-Aziz, M.D.**, traveled to Africa with **Gregory W. Randolph, M.D., F.A.C.S.**, **Paul Konowitz, M.D., F.A.C.S.**, and **David J. Lesnik, M.D.**, performing thyroid surgery, and **Harrison W. Lin, M.D.** spent time in Quito, Ecuador performing microtia surgery with **Tessa A. Hadlock, M.D.**, **Robin W. Lindsay, M.D.** and **Oon Tian Tan, M.D., Ph.D.**

Several other resident accomplishments from the last academic year that deserve specific mention include the following:

- **Rebecca J. Hammon, M.D.**, received CORE research funding from the Academy for her planned project on "The Role of Apoptosis in Clinical Response of HNSCC to Cisplatin Therapy." **Dr. Hammon** is one of our 7-year research residents supported by an NIH T32 training grant. She begins this work with her research mentor, **James W. Rocco, M.D., Ph.D.**
- **Dunia Abdul-Aziz, M.D.** and **David Jung, M.D., Ph.D.** were elected by the Academy to serve on the CORE grant review committee.
- **Kyle J. Chambers, M.D.** received a Partners Center of Expertise in Global and Humanitarian Health Travel grant to spend time at the Medical

—continued on page 8

‘What’s new at Beth Israel Deaconess Medical Center...’



Robert A. Frankenthaler, M.D.
Chief of Otolaryngology, BIDMC

In the previous issue of *Harvard Otolaryngology*, I wrote about the many exciting changes underway in the Division of Otolaryngology and Head and Neck Surgery. All of those changes, as well as those made in the past year, have been made with one goal in mind: to establish the division as a comprehensive center offering the entire breadth of state-of-the-art diagnostic and therapeutic services for patients with disorders of the ears, skull-base, nose, throat, head, and neck.

I am pleased to report that with the recent recruitment of a new faculty

member, fellowship-trained neurotologist **Selena E. Heman-Ackah, M.D., M.B.A.**, and the addition of new state-of-the-art outpatient and operative equipment, we have achieved that goal. We now offer more comprehensive otolaryngology services for patients in one location, providing convenient “one-stop shopping” for patients and referring physicians.

We are fortunate to have **Dr. Heman-Ackah** as the latest member of our team, which also includes rhinologist **David Caradonna, M.D., D.M.D.**, who trained in the Harvard Otolaryngology residency

program, fellowship-trained laryngologist **Pavan Mallur, M.D.**, and myself, a fellowship-trained head and neck surgical oncologist.

Dr. Heman-Ackah received her medical degree at the University of Cincinnati College of Medicine and completed her internship and residency training at the University of Minnesota Medical Center in Minneapolis. She completed her fellowship training in neurotology at New York University prior to joining the Beth Israel Deaconess Medical Center faculty this past summer. **Dr. Heman-Ackah** also holds an M.B.A. from the University of Cincinnati College of Business Administration.

Possessing a broad range of expertise, **Dr. Heman-Ackah** is able to provide expert care for patients with a wide variety of neurotologic disorders. Her clinical interests include chronic ear disease, acquired and congenital hearing loss, tumors of the ear, cerebellopontine angle masses, vertigo, and facial paralysis.

Based on **Dr. Heman-Ackah's** interest and expertise in age-related hearing loss, one of her goals in the coming year is to start an adult cochlear implant center. This service would also provide additional options for patients with hearing loss, such as bone-anchored hearing aids, in conjunction with the services of our excellent and expanding audiology program.



Dr. Heman-Ackah | Photo by Bruce R. Wahl.

Dr. Heman-Ackah also collaborates with Ekkehard Kasper, M.D., from Neurosurgery. Dr. Kasper is Co-Director of the BIDMC Brain Tumor Center and Director of Neurosurgical Oncology in the Beth Israel Deaconess Medical Center Cancer Center.

Drs. Heman-Ackah and Kasper are working to establish a comprehensive skull-base surgery clinic. This new clinic will provide multidisciplinary evaluation and advanced surgical treatment for patients with benign and malignant skull-base conditions, including cerebellopontine angle masses, meningiomas, encephaloceles, paragangliomas, and acoustic neuromas, among others.

We also continue to upgrade our equipment to provide leading-edge care in both the operative and outpatient setting. For example, we now offer the latest videonystagmography (VNG) for vestibular assessment. In addition,



Photo courtesy of Beth Israel Deaconess Medical Center.

to **Dr. Pavan Mallur**, the fellowship-trained laryngologist who joined our faculty in the summer of 2011. **Dr. Mallur** provides medical and surgical management of all voice disorders, including care of the professional voice, and the diagnosis and surgical treatment of upper airway stenosis and swallowing disorders. In a short period of time, **Dr. Mallur** has built a busy clinical practice that provides the latest, most effective therapies to patients with voice disorders, including novel therapies not often available elsewhere. We are fortunate to have a specialist of his caliber in our group.

As we have built this comprehensive program, we have continued to maintain focus on all aspects of our mission by conducting clinical research in several areas, remaining actively involved in educating our residents, and maintaining our commitment to providing high-quality, cost-effective care.

I look forward to sharing more information about these new services and other news from our division in the next issue of Harvard Otolaryngology and through the Beth Israel Deaconess Medical Center Department of Surgery website (www.bidmc.org/surgery). There you will also find information

about our multidisciplinary head and neck surgery program, which I lead, and our rhinology services, led by **Dr. Caradonna**. ■



Dr. Frankenthaler | Photo by Bruce R. Wahl.

we have new office-based distal chip endoscopes, which are connected to flat-screen monitors, enabling patients to view and thus better understand their condition and procedures. These technologies are in addition to the state-of-the-art equipment we introduced last year, such as Olympus video towers and Aura XP KTP lasers for in-office and OR treatments.

In the last issue, I introduced readers



Dr. Cardonna | Photo courtesy of BIDMC.

‘What’s new at Boston Children’s Hospital...’



Michael J. Cunningham, M.D., F.A.C.S.
Otolaryngologist-in-Chief, BCH

Dr. Nadol has spoken of academic departments being three-legged stools with the constituent supports being clinical care, research, and education. I’d like to take a moment to comment on the many innovative educational accomplishments of the faculty members of the Department of Otolaryngology and Communication Enhancement here at Boston Children’s Hospital.

We are proud to participate in the Harvard Otolaryngology Residency Training Program. We appreciate, in particular, the outstanding work of **Gillian R. Diercks, M.D., Megan M. Abbott, M.D., Aaron K. Remenschneider, M.D., and Ahmad R. Sedaghat, M.D., Ph.D.,** the four PGY-3 Harvard residents who rotated with us over the past academic year. Our Department also trains residents from Boston University, Tufts Medical Center, and the Republic of Ireland otolaryngology training programs. Coordinating the educational interactions of all of these residents is no small feat, and **Mark S. Volk, M.D., D.M.D., F.A.C.S.,** requires recognition for his important role as our Director of Resident Education in this respect.

This title is all the more appropriate, as **Dr. Volk’s** contributions to residency education extend well beyond these coordination duties. His Crisis Resource Management course teaches both residents and fellows teamwork and decision-making during critical care events.

This course is the only otolaryngology simulation course in the country, which takes place in the operating room using nursing and anesthesia staff in the point-of-care environment. CRICO has funded a pilot project using this course for similar simulation training for attending surgeons throughout the Harvard system.

Gi-Soo Lee, M.D., and Dr. Volk have also teamed up to create the Otolaryngology Residents Emergency Skills course. This second annual course, given this past July, was attended by all eighteen PGY-2 residents from each of the New England otolaryngology residency training programs. The course teaches basic skills ranging from assembling bronchoscopy equipment to setting up the operating room microscope. The overall goal is to assist junior residents in their transition from general surgery to otolaryngology-specific residency training. **Drs. Lee and Volk** have also organized a surgical orientation course for our resident rotators, and are developing an iPad-based electronic textbook for surgical skills instruction.

Fellowship training remains a major priority of our Department’s educational commitment. **Reza Rahbar, M.D., D.M.D., F.A.C.S.,** my Associate Otolaryngologist-in-Chief, serves as the director of our fellowship program. Together with the help of our new associate, **Jacob R. Brodsky, M.D., Dr. Rahbar** revamped the entire structure of our fellowship program to optimize the educational experience of our four current fellows. Due in part to these efforts, he

received the annual Trevor McGill, M.D. Award for Excellence in Teaching from the 2011-2012 graduate fellows.

Dr. Rahbar is also overseeing the transition of our fellowship program to anticipated ACGME accreditation. To assist in this process, he is the initial recipient of the Trevor J. McGill Pediatric Fellowship Director Chair. This Chair was established this past academic year to honor **Dr. Trevor McGill** for his lifelong commitment to fellowship teaching. The Chair was officially bestowed during a wonderful evening attended by many Boston area pediatric otolaryngologists, as well as **Gerald B. Healy, M.D., F.A.C.S.,** my predecessor as Otolaryngologist-In-Chief, and **Robin T. Cotton, M.D., F.A.C.S.,** our 2012 visiting professor.

Dr. McGill’s educational accomplishments extend beyond his daily instruction of our residents and fellows. Such is evidenced by his editorship of *Pediatric Otolaryngology: Principles and Practice Pathways*, the second edition of which was published last March. **Dr. McGill** will also be delivering the John Evans Lecture at the 2012 Annual Meeting of the British Otolaryngological Association in Sheffield, England.

Margaret A. Kenna, M.D., M.P.H., continues to play an integral role in coordinating the clinical research activities of our residents, fellows and attending staff in her role as Director of Clinical Research. She is also actively involved in working with many of our department members to standardize our diagnostic and evaluative approaches to children

with hearing loss, balance difficulties and tinnitus. She gave two courses at the annual meeting of the American Academy of Otolaryngology – Head and Neck Surgery (AAO-HNS) on these subjects with colleagues from Cincinnati and Toronto.

David W. Roberson, M.D., F.A.C.S., serves as Chair of our Quality Improvement and Compliance Committee, providing valuable instruction in this respect to our residents, fellows, and attending staff. His contributions in this arena are well known on the national scene. He chaired a seminar on avoiding sinus surgery disasters at this year's AAO-HNS annual meeting, and he organized an international group to improve worldwide tracheotomy care that convened in Glasgow, Scotland this past summer.

Dennis S. Poe, M.D., has an interest in eustachian tube dysfunction that is world-renowned. He is the founder of the International Eustachian Tube Study Group, and co-directs with **Ralph B. Metson, M.D., F.A.C.S.**, the bi-annual Harvard CME course, "Surgery of the Sinuses and Eustachian Tube." He also directs an international otologic research fellowship.

Greg R. Licameli, M.D., F.A.C.S., continues to direct our cochlear implant program and has been instrumental in getting our Balance and Vestibular Disorders Center started. He is also co-editing a new textbook, *Pediatric Otolaryngology*, with David E. Tunkel, M.D., to be published this coming fall.

Roger C. Nuss, M.D., F.A.C.S., in his role as Director of our Voice and Speech Clinic, co-directed with **Geralyn Harvey Woodnorth M.A., CCC-SLP** the ASHA-endorsed Pediatric Voice Disorders: Evaluation and Therapy course this past spring. **Dr. Nuss** has also been working in the international health realm with the Department of Otolaryngology in Kigali, Rwanda, exploring collaborative opportunities for surgical teaching and curriculum development.

Laurie A. Ohlms, M.D., remains an integral part of our residents' and fellows' education through her continued participation in our Chief of Service program. This weekly assignment is



Photo courtesy of Boston Children's Hospital.

divided equally among the faculty. The Chief of Service coordinates the care provided on our busy inpatient service.

Karen F. Watters, M.D., as a member of our Quality Improvement and Compliance Committee, has been involved in the creation and implementation of an airway SCAMP (Standardized Clinical Assessment Management Plan) for our institution. Dr. Watters is also the physician representative on our Department's

Quality Triad responsible for physician performance metrics.

Kenneth R. Whittemore, Jr., M.D., M.S., serves as our Department's Chief Compliance Officer and directs our monthly Morbidity and Mortality Conference. Along with **Dr. Kenna**, he also serves on the Clinician Scientist Mentoring Committee for the residency program. **Dr. Whittemore** also advocates for our specialty at both the state and national level.

We have two new associates this year. **Kathryn L. Colman, M.D.**, joined us from the University of Pittsburgh, where she had completed both her residency and fellowship training. **Dr. Colman** practices general pediatric otolaryngology, with a focus on sinus disorders. **Dr. Jacob Brodsky**, one of our own fellows, remained with us. **Dr. Brodsky** has an interest in vestibular disorders and will serve as Director of our newly opened Balance and Vestibular Disorders Center. The Center is only the third such pediatric balance center to open on the eastern seaboard and will provide a significant referral resource for regional otolaryngologists.

Gabriel Corfas, Ph.D., **Jeffrey R. Holt, M.D.** and **Gwenaelle Geleoc, Ph.D.**, mentor numerous post-doctoral fellows, graduate students, and undergraduate students in their laboratories at the F.M. Kirby Center and in the neurobiology program. **Dr. Geleoc** also teaches two courses for the hospital's Responsible Research program. **Dr. Holt** established the "Biology of the Inner Ear" course at the Marine Biological Laboratories in Woods Hole, Mass., designed to expose students to leading-edge scientists involved in hearing and deafness research. He recently became section leader for the neurophysiology block of the HST Introductory Neurobiology course. **Dr. Corfas** served four years as Chairman of the Education Committee of the Research Faculty Council at Children's. **Dr. Corfas** was recognized for his many years of quality research and education this September with a Neuroscience Research Chair sponsored by the Departments of Otolaryngology and Neurology at Children's.

Our Department's Center for Communication Enhancement, directed by **Howard Shane, Ph.D.**, consists of six programs – Diagnostic Audiology, directed by **Brian Fligor, Sc.D.**, CCC-A; Habilitative Audiology, directed by **Marilyn Neault, Ph.D.**; Speech Language Pathology, directed by **Geraldyn Harvey Woodnorth, M.A.**, CCC-SLP;

Augmentative Communication, directed by **John Costello, M.A.**, CCC-SLP; the Deaf and Hard of Hearing Program, directed by **Terrell Clark, Ph.D.**; and the Balance and Vestibular Research Program, directed by **Guang Wei Zhou, Sc.D.**, CCC-A.

The Center for Communication Enhancement staff trains forty-two clinical interns from several Boston academic institutions, and has taught 12 courses and presented 39 papers at national and international conferences over the past academic year. The Center also sponsors an annual "Needleman Conference," which emphasizes pediatric communication enhancement, and a biannual "Next Steps Conference," which focuses on pediatric deafness and hearing impairment.

Although my relatively new role as Otolaryngologist-in-Chief at Children's limits my daily interaction with our residents, I continue to devote much of my time to educational activities. I gave the annual Paul H. Hollinger, M.D. Visiting Lectureship in Pediatric Otolaryngology at the Children's Memorial Hospital in Chicago, and was honored to be the commencement speaker at the University of Rochester Department of Otolaryngology residents' graduation this past June. I was elected Vice Chair of the ACGME Residency Review Committee this past year, and will oversee the transition of all residency and fellowship programs into the new accreditation system. This fall, **Jennifer Shin, M.D.**, and I anticipate the publication of our book, *Otolaryngology Prep and Practice*, which is designed to prepare resident graduates for initial certification and practicing physicians for maintenance of certification.

The Department of Otolaryngology and Communication Enhancement faculty at Boston Children's Hospital have a real commitment to medical education. I know I speak for all my colleagues at Children's in expressing our appreciation for being an integral component of the Harvard Medical School Department of Otolaryngology and Laryngology. ■

continued from page 3 notes from the residency program director

University of Science and Technology in Mbarara, Uganda.

- **Megan Abbott, M.D.**, received a Children's Hospital House Officer Award for her research on costing in health care (her research mentor is **John G. Meara, M.D., D.M.D.**, at BCH).
- **Daniel S. Roberts, M.D.**, received an ARO Travel Research Award for his work with **Konstantina Stankovic, M.D., Ph.D.**

Our outstanding graduates of the class of 2012 included **Daniel S. Fink, M.D.**, **David H. Jung, M.D., Ph.D.**, **Linda N. Lee, M.D.**, **Harrison W. Lin, M.D.**, and **Aaron D. Tward, M.D., Ph.D.** Our invited speaker, Richard J. Wong, M.D., F.A.C.S., (graduate of the class of 1999), currently Associate Professor of Weil Medical College at Cornell University, delivered an excellent address entitled "Life after MEEI: Developing a Research Focus." The following awards were handed out:

- **Linda N. Lee, M.D.**, received the Chief Resident Teaching Award by vote of the junior residents.
- **Aaron D. Tward, M.D., Ph.D.** received the Jeffrey P. Harris Research Award for his FOCUS project entitled, "Mutation Discovery in Head and Neck Squamous Cell Carcinoma," a project that resulted in a first author publication in *Science*.
- PGY-4 residents **Daniel S. Roberts, M.D.** and **Josef Shargorodsky, M.D.**, won the annual Harvard Otolaryngology Research Poster Session.
- The graduating chiefs awarded the William Montgomery Teaching Award to **Jennifer L. Smullen, M.D.**

All five graduates contributed significantly throughout residency, published multiple manuscripts, and presented at multiple national meetings. They have all moved on to fellowship training this year (three in neurotology, one in facial plastic and reconstructive surgery, and one in laryngology). We eagerly anticipate their continued professional growth and development.

Each year, as we face the daunting task of reviewing hundreds of medical student applications, I think about graduation day, when we will celebrate the success of our residents. It is a culmination of five years of hard work on their part, and a reflection on the dedication and commitment of our faculty to teaching the future generation of otolaryngologists. It is a tradition of which we can all be proud.

The following staff members deserve special recognition for their continued involvement:

Associate Program Director

Kevin S. Emerick, M.D.

Assistant Program Director (BIDMC)

David S. Caradonna, M.D.

Assistant Program Director (BWH)

Charles M. Norris, Jr., M.D., F.A.C.S.

Assistant Program Director (BCH)

Mark S. Volk, M.D., D.M.D., F.A.C.S.

ENT Education Committee

David S. Caradonna, M.D.

Jaimie DeRosa, M.D., F.A.C.S.

Daniel G. Deschler, M.D., F.A.C.S.

Kevin S. Emerick, M.D.

Ramon A. Franco, Jr., M.D.

Stacey T. Gray, M.D., F.A.C.S.

Tessa A. Hadlock, M.D.

Christopher J. Hartnick, M.D., M.P.H.

Eric H. Holbrook, M.D.

Joseph B. Nadol, Jr., M.D.

Charles M. Norris, Jr., M.D., F.A.C.S.

H. Gregory Ota, M.D.

Gregory W. Randolph, M.D., F.A.C.S.

Steven D. Rauch, M.D.

William Sewell, Ph.D.

Resident Members:

Sang Kim, M.D.

Daniel Roberts, M.D.

Gillian Diercks, M.D.

Ahmad Sedaghat, M.D., Ph.D.

Resident Advisors 2011-2012

Michael J. Cunningham, M.D.

Jaimie DeRosa, M.D., F.A.C.S.

Daniel G. Deschler, M.D., F.A.C.S.

Kevin S. Emerick, M.D.

Stacey T. Gray, M.D., F.A.C.S.

Eric H. Holbrook, M.D.

Michael J. McKenna, M.D.

Steven D. Rauch, M.D.

FOCUS Project Mentors

Michael J. Cunningham, M.D., F.A.C.S.

Tessa A. Hadlock, M.D.

James Heaton, Ph.D.

Konstantina Stankovic, M.D., Ph.D.

Donald Keamy, Jr., M.D., M.P.H.

John Meara, M.D., D.M.D.

Christopher J. Hartnick, M.D., M.P.H.

Ralph B. Metson, M.D., F.A.C.S.

Claus Wilke, Ph.D.

Michael J. McKenna, M.D.

Daniel G. Deschler, M.D., F.A.C.S.

Benjamin S. Bleier, M.D.

Phillip C. Song, M.D.

Mock Oral Boards Examiners

Mack L. Cheney, M.D., F.A.C.S.

Michael J. Cunningham, M.D., F.A.C.S.

Stacey T. Gray, M.D., F.A.C.S.

Tessa A. Hadlock, M.D.

Donald Keamy, Jr., M.D., M.P.H.

Derrick T. Lin, M.D., F.A.C.S.

Steven D. Rauch, M.D.

James W. Rocco, M.D., Ph.D.

Michael B. Rho, M.D., F.A.C.S.

Jennifer J. Shin, M.D. ■

Save the date.

Upcoming Continuing Medical Education Courses:

Update on Tracheo-esophageal Voice Restoration and Laryngectomy Care, directed by Daniel G. Deschler, M.D., F.A.C.S., and Glenn Bunting, M.S.

March 15–16, 2013, Massachusetts Eye and Ear Infirmary.

Laryngology Disorders Update, directed by Ramon A. Franco, Jr., M.D., and Phillip C. Song, M.D.

May 9–11, 2013, Massachusetts Eye and Ear Infirmary.

12th International Facial Nerve Symposium, directed by Tessa A. Hadlock, M.D., Mack Cheney, M.D., and Michael McKenna, M.D.

June 28–July 2, 2013, Liberty Hotel.

Harold F. Schuknecht Visiting Professor Lecture:

CI and ABI in inner ear malformations, Levent Sennaroglu, M.D., Professor of Otolaryngology, Hacettepe University, Ankara, Turkey.

January 10, 2013, 7a.m., Massachusetts Eye and Ear Infirmary.

Photo by Garyfallia Pagonis.



For more information regarding these events, please contact barbara_beckmanbeard@meei.harvard.edu.

'What's new at Brigham and Women's Hospital'



Jo Shapiro, M.D.
Division Chief, Otolaryngology, BWH

The Division of Otolaryngology at Brigham and Women's Hospital has been working in close collaboration with hospital leadership to improve the quality and safety of patient care and to maintain the high standards of professionalism across the institution. In addition to having the pleasure of being part of the Harvard Otolaryngology Residency Program, we continue to be a major teaching site for Harvard medical students and interns in the Department of Surgery. Our faculty provides preceptorship for various trainees, including primary care medicine residents, allergy/immunology fellows, oral medicine residents, and medical students.

Donald J. Annino, Jr., M.D., D.M.D., is an integral part of the hospital's nationally renowned facial transplant team, having participated in every facial transplant surgery at BWH. He works collaboratively in clinical, teaching, and research endeavors with the Head and Neck Oncology Program, the Department of Neurosurgery in the Endoscopic Skull Base Center, the Division of Thoracic Surgery, and the Division of Plastic Surgery. He also directs our Transoral Robotic Surgery program. He has a highly specialized surgical practice that includes head and neck cancer surgery, reconstructive surgery, and anterior skull base surgery.

Neil Bhattacharyya, M.D., F.A.C.S., Associate Division Chief, has published numerous studies on the diagnosis and

treatment of acute and chronic sinusitis, in addition to outcomes research for other diseases such as papillary thyroid cancer and sinus cancer. He plays a national role in developing evidence-based guidelines for otolaryngology. He is an associate editor for *Otolaryngology Head and Neck Surgery*, and serves on the editorial boards for multiple publications, including *Laryngoscope* and the *American Journal of Rhinology*. He continues to mentor residents and students, supervising their research. Many of his mentees have been selected to present their research work and have received several awards. He maintains a busy clinical practice in rhinology, laryngology, and sleep apnea.

Jayne R. Dowdall, M.D., is our newest member of the team, as a joint recruit with MEEI. She completed her fellowship in laryngology at MEEI under the direction of Dr. Ramon Franco. To strengthen our office-based laryngology practice, **Dr. Dowdall** works with interdisciplinary teams to address voice, airway, and swallowing disorders both within our field and across specialties. She has a special interest in patient-centered translational research that drives her efforts. Earlier this year, she was recognized for her role in the AAO-HNS as a recipient of the Adam T. Ross Leadership Excellence Award.

Laura A. Goguen, M.D., continues her involvement in otolaryngology teaching at a local and national level. She is an integral member of the Head and Neck program at the Dana Farber Cancer

Institute, providing clinical care and research efforts that explore issues related to dysphagia after chemoradiation therapy and neck management in head and neck cancer. She collaborates with the thoracic surgery service to provide novel combined antegrade, retrograde esophageal dilation for patients with complete esophageal stenosis. She has published manuscripts, given talks, and presented posters at national meetings on these topics. She received the Partners in Excellence Award for her role in the dysphagia management team at BWH and DFCI.

Daniel J. Lee, M.D., F.A.C.S., is our division neurotologist. He is a valued contributor to our division by taking care of our patients needing otologic or neurotologic management in collaboration with the Department of Neurosurgery at BWH.

Charles M. Norris, Jr., M.D., F.A.C.S., is the surgical director of the DFCI-BWH Head and Neck Oncology program, where he continues his involvement in the clinical, research, and teaching enterprises. He is one of the most valued educators in our department. Following the departure of **Dr. Keith Saxon**, who moved back to Missouri, **Dr. Norris** took over as site director for the Harvard otolaryngology resident rotations at BWH.

Jennifer J. Shin, M.D., was recruited to the division this year. She completed her residency at the Harvard Otolaryngology Residency program, and then went on to complete both

a Masters in Epidemiology at the Harvard School of Public Health and a pediatric otolaryngology fellowship at MEEI. While completing her training, **Dr. Shin** was the Regional Director of Pediatric Otolaryngology at the Southern California Permanente Medical Group. She is a nationally recognized expert in evidenced-based practice and is the lead editor of *Evidence-Based Otolaryngology*, a highly regarded textbook that entered its second printing in 2010. She serves as an associate editor for clinical epidemiology and outcomes research for *Otolaryngology–Head and Neck Surgery*, and has authored an invited series on this topic. Her second book, *Otolaryngology Prep and Practice*, which she co-edited with **Dr. Michael Cunningham**, debuts this year.

Tom Thomas, M.D., M.P.H., joined our faculty in September 2011. Due to his considerable experience in robotic surgery, **Dr. Thomas** was appointed Associate Director of our new Transoral Robotic Surgery program, joining **Dr. Annino** in further developing our robotic surgery to offer patients the opportunity to undergo a more minimally invasive resection of head and neck tumors.

Lynn Kepnes, N.P., is one of the core contributors to our clinical mission. In addition to coordinating the clinical aspects of our ambulatory practice, she sees patients with general otolaryngologic problems. After some observational training with several generous physicians at MEEI, **Ms. Kepnes** developed some further expertise in evaluating patients with tinnitus and dizziness, providing improved access and care to our BWH patient population.

As Division Chief, I dedicate much of my time as a clinician educator. I serve on the American Board of Otolaryngology Education Council and was recently appointed as a senior examiner for the boards. I also currently direct the Center for Professionalism and Peer Support at BWH. With a grant from CRICO/RME, I am working on a system-wide disclosure program. My current interests at BWH include: professionalism in giving difficult feedback, disclosure and apology, peer support, and oropharyngeal dysphagia. I am also involved in developing a training program for otolaryngology in Uganda

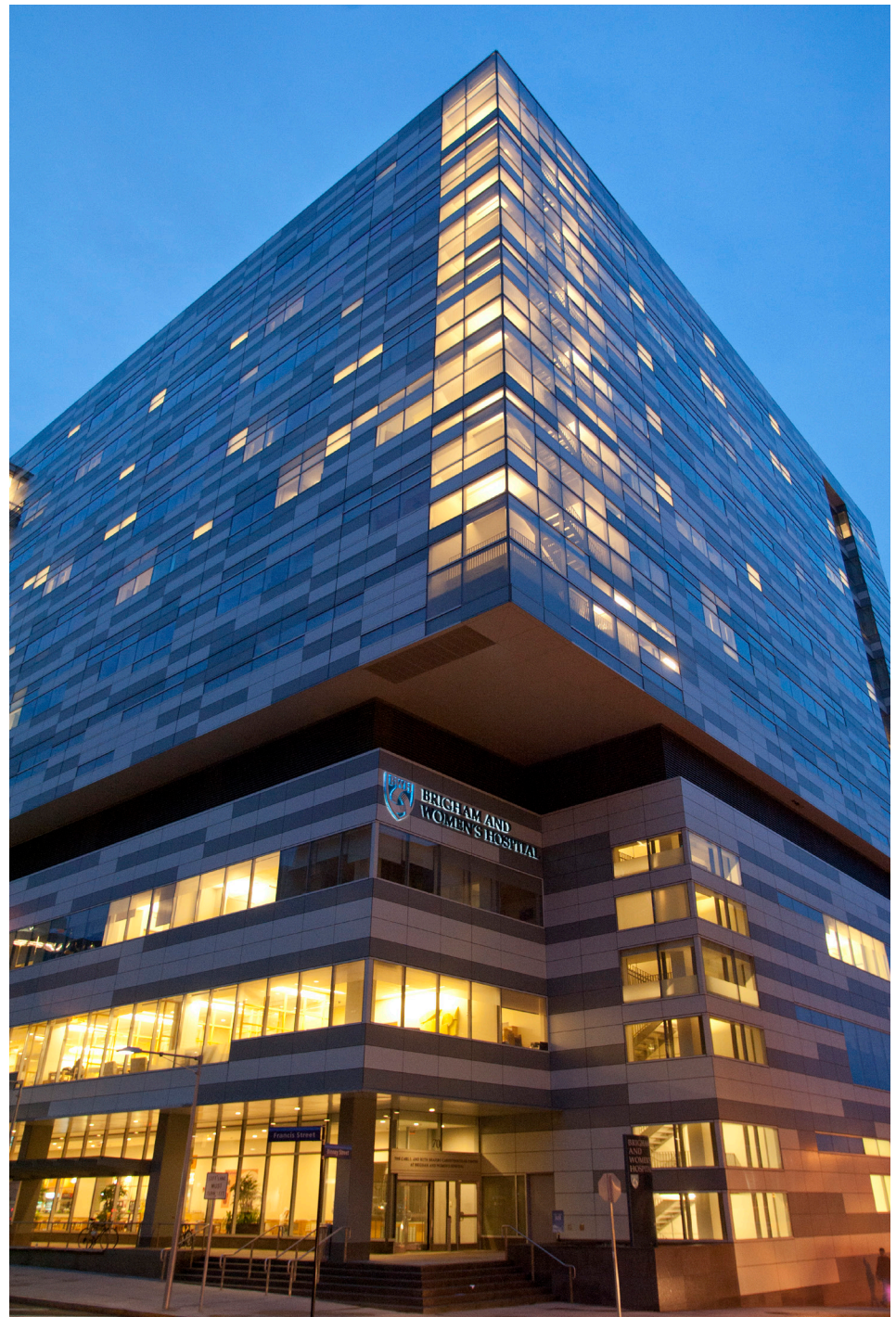


Photo courtesy of Brigham and Women's Hospital.

at Mbarara University of Science and Technology.

Our division is enhanced by a team of committed professionals who all provide excellent patient care. **Sara Springer, Au.D, CCC-A**, leads our Audiology service, **Peg Toro, Au.D, CCC-A**, directs the newborn hearing screening program, and **P.J. Su, CCC-SLP**, leads the team that provides speech and swallowing evaluation and treatment for the entire inpatient and outpatient population at BWH and DFCI.

Alex Schwarzer, our new division administrator leads our entire staff and interfaces with the administrators at BWH, particularly in the Department of Surgery. He is skilled at strategic planning, management and operations.

We have an extraordinarily committed group of talented staff, and we are working closely together to develop creative processes and solutions to the upcoming changes anticipated for health care. Our whole team continues to maintain a supportive and collegial environment. ■



‘What’s new at Massachusetts Eye and Ear Infirmary...’

Joseph B. Nadol, Jr., M.D.
Chief and Chairman, Otolaryngology
Massachusetts Eye and Ear Infirmary
Massachusetts General Hospital

As sponsoring institution of the Harvard Otolaryngology Residency Program, the Department of Otolaryngology at Massachusetts Eye and Ear Infirmary continues to honor its commitment to delivering excellence in clinical care, research, and especially teaching. Our physicians and scientists are proud to serve as mentors for future leaders in the field of otolaryngology.

Our commitment to training future leaders in the field is not only seen in our educational efforts, as described by Program Director **Stacey Gray, M.D., F.A.C.S.**, but also in the Department’s continuing efforts to grow and succeed. This success is perhaps best demonstrated by our continued presence in the U.S. News and World Report rankings. This year the Department was ranked #3 in the nation for otolaryngology services.

In 2012 the Department expanded by recruiting five new full-time physicians, including three at the main campus and two at our suburban centers. We now offer comprehensive laser and reconstructive surgery at the Carolyn and Peter Lynch Center for Laser and Reconstructive Surgery and comprehensive care for sleep disorders at our multidisciplinary Sleep Center at Massachusetts Eye and Ear, Quincy.

Two of our physicians, **James W. Rocco, M.D., Ph.D.**, and **Derrick T. Lin, M.D., F.A.C.S.**, now provide advanced robotic surgery for patients suffering from head and neck cancer using technology available at Winchester Hospital.

We also happily anticipate the opening of our Otolaryngology Surgical Training Laboratory in January. The laboratory will advance instructional capabilities in all subspecialties of otolaryngology, including skull base surgery, head and neck surgery, laser surgery, otology and neurotology, facial plastic and reconstructive surgery, sinus surgery, laryngology, and pediatric otolaryngology. The new laboratory will serve as a resource for residents and fellows, as well as experienced surgeons by facilitating continuing medical education.

Just as our facilities and resources continue to grow, so do our physicians and scientists, who continue to develop themselves as experts in their subspecialties on the international stage through clinical care, grant funding, awards, scholarly work, and public outreach.

New Recruits

This year we welcome three new full-time physicians and faculty members at our main campus and two at our suburban centers.



Jayme R. Dowdall, M.D., is a joint recruit to our Laryngology Division and to Brigham and Women’s Hospital. She has been appointed as an Instructor in Otology and Laryngology at Harvard Medical School. Dr. Dowdall served as a clinical fellow in the Laryngology Division at Massachusetts Eye and Ear Infirmary previously.



Michael H. Fattal, M.D., recently joined the Massachusetts Eye and Ear, Concord practice and was appointed as a Clinical Instructor in Otology and Laryngology at Harvard Medical School.



Monica S. Lee, M.D., recently joined the Massachusetts Eye and Ear, Weymouth practice and was appointed as a Clinical Instructor in Otology and Laryngology at Harvard Medical School.



Robin W. Lindsay, M.D., was recruited to the Facial Plastic and Reconstructive Surgery Division and appointed as an Assistant Professor in Otology and Laryngology at Harvard Medical School. Dr. Lindsay served as a clinical fellow in the Facial Plastic

and Reconstructive Surgery Division at Massachusetts Eye and Ear Infirmery previously.



Alicia M. Quesnel, M.D., was recruited to the Otology Division and appointed as an Instructor in Otology and Laryngology at Harvard Medical School. Dr. Quesnel trained in the Harvard Otolaryngology Residency Program and as a clinical fellow in the Otology Division previously.

New Leadership

Several members of our faculty were appointed to new leadership positions this year:

In an effort to strengthen leadership and honor our commitment to clinical care, research, and teaching, we have appointed **Michael J. McKenna, M.D.,** Associate Chief for Clinical Affairs, **M. Charles Liberman, Ph.D.,** Associate Chief for Research, and **Steven D. Rauch, M.D.,** Associate Chief for Academic Affairs.

We also appointed **Tessa A. Hadlock, M.D.,** Director of Facial Plastic and Reconstructive Surgery in January.

Daniel M. Merfeld, Ph.D., M.S.E., and **Ruth Anne Eatock, Ph.D.,** were promoted to Professors of Otology and Laryngology at Harvard Medical School this year. **Ramon A. Franco, Jr., M.D.,** **Derrick T. Lin, M.D., F.A.C.S.,** and **James W. Rocco, M.D., Ph.D.,** were appointed Associate Professors, and **Hideko Heidi Nakajima, M.D., Ph.D.,** was appointed Assistant Professor.

Research Success

Research initiatives at Massachusetts Eye and Ear Infirmery continue to thrive, as evidenced by significant advances and support through national grant funding. The following is a list of notable research activity and news from the Department:

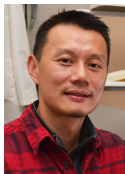


Benjamin S. Bleier, M.D., received two grant awards this year, one from the American Rhinologic Society to fund his project titled "MDR1/P-



Photos by Garyfallia Pagonis.

gp overexpression and negative feedback insensitivity in CRSwNP," and another from the Michael J. Fox Foundation for his project titled "Non-invasive striatal delivery of glial derived neuropathic factor (GDNF)."



In collaboration with Seok-Hyun Yun, Ph.D., from the Wellman Center for Photomedicine at Massachusetts General Hospital, **Jeffrey Tao Cheng, Ph.D.,** is developing a probe sensor that can be applied to Optical Coherence Tomography (OCT) for a revolutionary noninvasive diagnostic tool for middle ear disease.

Dr. Cheng was also awarded a Harvard Catalyst pilot grant for his project, "OCT for middle ear disease."



Bertrand Delgutte, Ph.D., was awarded a Curing Kids Fund grant from the Infirmery for his project titled "Restoring Binaural Hearing with Cochlear Implants in Early-Onset Deafness," which will study ways that perceptual training can help the brain to locate sounds in subjects with early onset deafness. Results will eventually lead to new sound processors and rehabilitation strategies for people with bilateral cochlear implants.



Ruth Anne Eatock, Ph.D., received an R01 grant from the National Institute on Deafness and other Communication Disorders for her project titled "Synaptic Processing in the Vestibular System."



Ramon A. Franco, Jr., M.D., will lead a multi-national research collaboration to study throat lesions that can lead to cancer. Working in conjunction with several European nations, the research will use the DNA, RNA, and protein changes seen in a patient's biopsy sample and develop a database of information that could help to provide more individualized care. This project is funded by a grant from Massachusetts Life Sciences Center.



A few years ago, **Sharon G. Kujawa, Ph.D.** and **M. Charles Liberman, Ph.D.,** discovered that overexposure to moderate levels of noise can cause degeneration of cochlear nerve fibers, even if the hearing thresholds (and cochlear hair cells) completely recover. This year, **Drs. Kujawa and Liberman,** along with graduate student Adam Furman, showed that this degeneration is selective for the high-threshold neurons that normally help us hear in a noisy

news and notes

environment. They think this may explain why hearing-in-noise ability deteriorates in the aging ear.



Drs. Kujawa and Liberman were also awarded a new 5-year R01 grant from the NIDCD to continue their study of the role of noise-induced cochlear neuronal degeneration in the deterioration of hearing-in-noise abilities and in the generation of tinnitus.

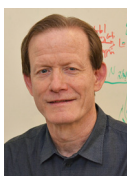
Dr. Liberman was also awarded a new two-year R21 grant from the NIDCD to study the idea that neonatal thiamine deficiency causes a special type of sensorineural hearing loss called auditory neuropathy.



Barbara Herrmann, Ph.D., CCC-A, began a new clinical study of infant evoked responses to new stimuli, funded by Natus Medical, Inc.



Daniel J. Lee, M.D., F.A.C.S., and **Albert Edge, Ph.D.**, were awarded an R21 grant from the NIDCD for their project titled "Delivery of Channel Rhodopsin for Optogenetic Control of Neurons in the Cochlea." The major goal of this grant is to optimize the expression of ChR2 in the auditory periphery using both direct transfection and stem cell mediated approaches. Both anatomic studies and physiologic characterization of light-activated responses will be performed.



Richard F. Lewis, M.D., was awarded an R01 grant from the National Institute on Deafness and Other Communication Disorders for his project titled, "Vestibular Migraine Investigated with Psychophysical and Oculomotor Tests."



Under the direction of **Oon Tian Tan, M.D., Ph.D.**, the Carolyn and Peter Lynch Center for Laser and Reconstructive Surgery

has recruited a research fellow to investigate the genetic origin of vascular malformations.



Jennifer R. Melcher, Ph.D., was awarded a grant from the Tinnitus Research Consortium to fund her project titled, "Tinnitus, auditory brainstem response, and cerebral cortical structure." Dr. Melcher was also awarded an R21 grant this year for her project titled, "Sensorimotor gating in humans with tinnitus and hyperacusis."



Daniel M. Merfeld, Ph.D., M.S.E., was awarded a grant from the NIH-NIDCD for his project titled, "Innovative Methodologies for measuring behavioral vestibular thresholds."



James W. Rocco, M.D., Ph.D., has begun recruiting participants to his NIH-funded study of biomarkers for predicting outcome in oropharyngeal cancer. With Edmund Mroz, Ph.D., he has developed a way to use DNA sequencing of tumors to measure differences among cancer cells within individual tumors. Their work indicates that such "intra-tumor heterogeneity" contributes to poor outcomes in head and neck cancer.



John Rosowski, Ph.D., was awarded an R01 grant from the NIDCD titled, "Middle-Ear Mechanics in Normal and Pathological Ears."



Felipe Santos, M.D., was awarded a grant from the American Otological Society, for his study titled, "Epigenetic regulation of hair cell regeneration in zebrafish."



Fuxin Shi, Ph.D., was awarded a Curing Kids Fund grant from the Infirmity to study "Exploiting the Wnt Signaling Pathway for Curing Deafness in Children," which will test the feasibility of

curing deafness in children via regeneration of functioning hair cells.



Konstantina Stankovic, M.D., Ph.D., in collaboration with Anantha P. Chandrakasan, Ph.D., from the Massachusetts Institute of Technology, was the first to have extracted energy from the biologic battery in the inner ear to power electronics without damaging hearing. This sets the stage for future autonomous sensing of key molecules in the inner ear and its vicinity to establish diagnosis and guide therapy.

Dr. Stankovic also collaborates with the Ecole Polytechnique Federal de Laussane (EPFL) in Switzerland, and was the first to have imaged cells inside the inner ear with high resolution and without contrast dyes using two-photon microscopy through the round window. This sets the stage for ultimate cochlear endoscopy in humans to establish cellular diagnosis.

Awards and Honors

From leadership roles in professional organizations to prestigious awards for contributions in research and clinical care, our faculty members have garnered numerous honors over the course of the year. We recognize their remarkable accomplishments below:



Daniel G. Deschler, M.D., F.A.C.S., was named President Elect of the Society of University Otolaryngologists–Head and Neck Surgeons.



Alex Grilli, M.D., was elected to the Board of Directors of the Massachusetts Society of Otolaryngology this year.



Tessa A. Hadlock, M.D., was appointed Co-Chair of the 2013 American Academy of Facial Plastic and Reconstructive Surgery segment of the upcoming Combined Otolaryngological Spring Meetings.



M. Charles Liberman, Ph.D., received the Carhart Memorial Award from the American Auditory Society for "significant and lifelong contributions to the understanding of human hearing."



The American Academy of Otolaryngology–Head and Neck Surgery recently recognized **Joseph B. Nadol, Jr., M.D.**, for his contributions to the field of Otolaryngology. **Dr. Nadol** was an honorary guest lecturer at the AAO–HNS annual meeting, where he was presented the prestigious AAO–HNSF/Michael M. Paparella, M.D., endowed lecture for distinguished contributions in clinical otology.



Daniel M. Merfeld, Ph.D., M.S.E., was named a senior fellow of the Institute of Electrical and Electronics Engineers. Dr. Merfeld is also now a regular member of the Sensorimotor Integration Study Section of the National Institutes of Health.



Mark Parker, Ph.D., CCC-A, was awarded the 2012 American Speech and Hearing Association's Editor's Award for his article "Biotechnology in the Treatment of Sensorineural Hearing Loss."



Gregory W. Randolph, M.D., F.A.C.S. performed the 3,000th case of intraoperative nerve monitoring during thyroid/parathyroid surgery, placing Massachusetts Eye and Ear Infirmary at the forefront of neural monitoring experience worldwide. The intraoperative nerve-monitoring program is a joint effort by the Departments of Otolaryngology, Anesthesia, and Audiology at Massachusetts Eye and Ear Infirmary.

Dr. Randolph has a number of other accomplishments to report, including:

- Received the AAO–HNS Foundation's 2012 Distinguished Service Award.

- Appointed an advisory member of the 20th International Federation of Otorhinolaryngological Societies World Congress (IFOS) global meeting in Seoul, Korea in 2013.
- Appointed to the Executive Steering Committee of the World Congress on Thyroid Cancer in 2013 in Toronto, Canada.
- Served as Co-Chair of the 2012 Voice in Thyroid Surgery, Laryngeal AAO–HNS Guidelines task force.
- Named to the 2013 Thyroid Nodule and Thyroid Cancer Guidelines task force, as well as the Thyroid Cancer Preoperative Imaging task force for the American Thyroid Association and was appointed Treasurer-elect of the Executive Board of Directors of this organization.
- Served as course director and lecturer at the 3rd International Neural Monitoring Study Group in Thyroid Surgery in Baveno, Italy.

Dr. Randolph gave a number of lectures this year, including:

- George Choa Visiting Professor in the Department of Surgery at Li Ka Shing Faculty of Medicine at the University of Hong Kong.
- Charles Proye Lecture for the European Society of Endocrine Surgery in Gothenburg.
- British Journal of Surgery Lecture for the British Association of Endocrine and Thyroid Surgeons in Cardiff, UK.

Dr. Randolph completed a second edition of *Surgery of the Thyroid and Parathyroid Glands*, published by Saunders/Elsevier. The text was named the Saunders/Elsevier best-selling book at the annual AAO–HNS meeting this year in Washington, D.C.



James W. Rocco, M.D., Ph.D., now represents the American Head and Neck Society at the American Joint Committee on Cancer (AJCC) and was also appointed to the Working Group for the AJCC 8th edition Staging Manual.



Dr. Rocco and Derrick T. Lin, M.D., F.A.C.S., gave an instructional course at the 2012 AAO–HNS meeting in Washington, D.C. on "The HPV epidemic and Oropharyngeal Cancer."



Steven D. Rauch, M.D., received the Franz Escher Award and Lectureship at the 99th Meeting of the Swiss Society of Otorhinolaryngology in Berne, Switzerland.



Jennifer L. Smullen, M.D., received the 2012 William Montgomery Teaching Award, which is awarded by residents to a faculty member of the Harvard Medical School Department of Otolaryngology for excellence in teaching.



Konstantina Stankovic, M.D., Ph.D., received the Young Investigator Award from the American Auditory Society.

Public Outreach

Our faculty and trainees are committed not only to the patients within their practices, but also to the surrounding local and global community.

The Department hosted two public forums this year. The Sinus Center hosted its annual forum on the nose and sinuses, called "Know Your Nose" in October, and the Department of Audiology, along with members of the Otolaryngology Division, presented on hearing and hearing loss in September.

Members of the faculty hosted various public cancer screenings this year. The Head and Neck Surgical Oncology Division hosted an oral, head, and neck cancer screening at our Boston location, as well as our Quincy, Milton, and Weymouth locations, in April. In collaboration with the American Academy of Dermatology, **Jessica Fewkes, M.D.**, and **Oon Tian Tan, M.D., Ph.D.**, provided skin cancer screenings in May.

news and notes

The Facial Plastic and Reconstructive Surgery Division, led by **Tessa A. Hadlock, M.D.**, went on a mission to Quito, Ecuador in March 2012 and another to Antigua, Guatemala in July 2012. **Dr. Tan** was instrumental in installing a Candela/Syneron Alexandrite Laser at the Instituto Medico Tierra Nueva, Quito for laser hair removal in microtia patients. The laser was funded by an award from the Massachusetts Eye and Ear Infirmary Curing Kids Fund.

The Facial Plastic and Reconstructive Surgery Division also continues their collaboration with the R.O.S.E. Fund, offering reconstructive surgery to victims of domestic violence.



Michael Cohen, M.D., served on a medical mission to Addis Ababa, Ethiopia in October 2012, along with audiologist Ann-Marie Hennessy and six other medical professionals from the group "Healing the Children," providing surgical care to children with ear disease, as well as basic otologic care to the 150 children at the Mekanissa School for the Deaf.



Ramon A. Franco, Jr., M.D., continues his biannual medical mission to Honduras to perform airway reconstructive surgery, to address voice problems, and to care for patients with laryngeal cancer. Dr. Franco serves as a

mentor to specialists in Honduras and to trainees in the country's only ear, nose, and throat residency program.

Operation Airway, a non-profit initiative directed by **Christopher J. Hartnick, M.D.**, continues its annual medical missions to Ecuador to care for children with airway disorders. A team of surgeons, anesthesiologists, pediatric nurses, and ICU physicians from the Massachusetts General Hospital for Children provide needed medical care while also sharing their knowledge of collaborative specialty care for complex airway surgeries with local healthcare teams. The Red Sox Foundation recently donated \$5,000 to this initiative.

Photo courtesy of the Boston Red Sox.





Gregory W. Randolph, M.D., F.A.C.S., led a surgical goiter mission to Migori, Kenya through the Kenya Releif African Aid Organization.

Other members of the team are **Paul Konowitz, M.D., F.A.C.S.**, **David Lesnik, M.D.**, resident **Dunia Abdul-Aziz, M.D.**, and **Nancy Kotzuba, R.N.** The team performed 25 thyroid surgery cases in three days, including 18 goiters.

ENT Community Outreach

As leaders in the field of Otolaryngology, our faculty travels internationally to extend their subspecialty knowledge to other physicians in the field. The following are highlights of our faculty outreach:



Benjamin S. Bleier, M.D., served as an invited speaker on "Endonasal Pharmacosurgery: A Paradigm Shift in CNS Drug Delivery" for the American

Society of Pediatric Otolaryngology in Virginia.

Dr. Bleier lectured on his current research, "Blood-Brain Barrier Modification Using Heterotopic Nasal Mucosal Grafting" at the Michael J. Fox Foundation in New York.

Dr. Bleier lectured at the Turkish Society of Otorhinolaryngology and Head and Neck Surgery Congress on "State of the Art Techniques in Endoscopic CSF Leak, Skull Base, and Encephalocele Repair" and "Endoscopic Sinus Surgery and Management of Advanced Frontal Sinus Disease."



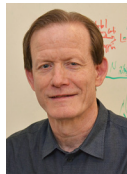
Mack L. Cheney, M.D., F.A.C.S., was appointed as an affiliate of the Department of Global Health and Social Medicine at Harvard Medical

School to recognize his contributions to the Program in Global Surgery and Social Change. **Dr. Cheney** routinely represents the Infirmiry's global health interests within the community, including at the MGH Global Health Day event earlier this year. **Drs. Hadlock and Cheney**

travelled to Kenya this year for a site visit at a surgical teaching hospital to train local surgeons.



Daniel G. Deschler, M.D., F.A.C.S., served as Visiting Professor of the Departments of Otolaryngology–Head and Neck Surgery at Johns Hopkins Medical Center, at the Memorial Sloan Kettering Cancer, and at the University of Western Ontario.



Albert Edge, Ph.D., spoke at the 38th Midwinter Meeting of the Association for Research in Otolaryngology on stem cell-derived neural progenitor grafts to reinnervate the de-afferented organ of Corti in vivo.



Tessa A. Hadlock, M.D., and **Dr. Cheney** will host the upcoming International Facial Nerve Symposium in June 2013 in Boston, Mass. They have recruited 44 international faculty members for the event.

Dr. Hadlock gave a number of lectures this year, including:

- "What's New with the Facial Nerve?" at the New England Facial Plastic Surgery Society meetings.
- "Research in Facial Paralysis" and "Contemporary Facial Nerve management" at the American Society for Peripheral Nerve meetings in Las Vegas.
- "Assessing Facial Nerve Outcomes in Neurofibromatosis" at the neurofibromatosis meetings of the National Institutes of Health in Bethesda, Md.
- "Complex Cases in Facial Paralysis" at the American Academy of Facial Plastic and Reconstructive Surgery annual meetings.

Dr. Hadlock also served as an international faculty member at the 5th Annual Facial Plastic Surgery Course in Mallorca, Spain.

Dr. Cheney and Dr. Hadlock have contracted with Quality Medical Publishing in St. Louis for a new edition of *Facial Surgery: Plastic and Reconstructive*.



Daniel J. Lee, M.D., F.A.C.S., served as Visiting Professor and Grand Rounds speaker, delivering his lecture, "Update on Superior Canal Dehiscence Syndrome," at New York University School of Medicine.



Richard F. Lewis, M.D., lectured on "Vestibular Psychophysics" at the Vestibular contributions to tilt perception in non-human primates, Symposium on Association for Research in Otolaryngology, San Diego CA, February 2012.

At the recent 2012 American Head and Neck Society 8th International Conference in Toronto, **James W. Rocco, M.D., Ph.D.**, served on the program committee, co-chaired the program on basic and translational research, introduced Dr. Tak Mak, the Basic Science plenary speaker, organized and moderated a panel on "Head and Neck Cancer Genomics: Implications for Therapy", spoke about "Intra-tumor heterogeneity in squamous cell carcinoma: Opening Pandora's Box" and directed an instructional course on "Doing Research: Setting up a Clinical and Translational Research Program."



Dr. Rocco was also a visiting professor at the University of Texas MD Anderson Cancer Center, where he gave a series of three lectures on the basic science, translational aspects, and clinical care of patients with oropharyngeal squamous cell carcinoma.



Dr. Rocco and Derrick T. Lin, M.D., F.A.C.S., gave an instructional course at the American Academy of Otolaryngology meeting in Washington, D.C. on "The HPV epidemic and Oropharyngeal Cancer." ■

news from our alumni

Please keep us apprised of your latest accomplishments by submitting news to Suzanne_Day@meei.harvard.edu.

2010

Completed a fellowship in Rhinology at Massachusetts Eye and Ear Infirmary in 2010.

Zachary M. Soler, M.D., M.Sc., is an Assistant Professor in the Department of Otolaryngology–Head and Neck Surgery at the Medical University of South Carolina, where he serves as a member of the Rhinology and Sinus Surgery Division.

2005

Completed the Harvard Otolaryngology Residency Program in 2005.

Adele K. Evans, M.D., is an Assistant Professor in the Department of Otolaryngology at Wake Forest School of Medicine. She received the National AHEC Organization Center of Excellence Award 2012 for her multi-disciplinary, multi-modality educational program entitled, “Endotracheal Tube Choice and Use for the Neonatal and Pediatric Intensivist.” This program has trained over 120 practitioners in nursing, respiratory therapy, emergency medical services, and neonatal and pediatric medicine over the last 15 months. She has been appointed to the Core Education Faculty at Wake Forest, and will play a critical role in the renovation of the medical school’s primary curriculum. She has been working to develop a self-sustaining medical and surgical mission trip as joint venture between Wake Forest School of Medicine and Marchena Hospital in Bonao, Dominican Republic. She is also responsible for pediatric otolaryngology mission trips to perform a variety of surgeries, including primary palate, VPI

surgery, lip revision surgery, chronic ear surgery and adenotonsillar surgery. She also serves on two advisory committees to the Dean of Global Health and Continuing Medical Education.

2000

Completed a fellowship in Facial Plastic and Reconstructive Surgery and Microvascular Surgery at Massachusetts Eye and Ear Infirmary in 2000.

Jeffrey H. Spiegel, M.D., F.A.C.S., was recently appointed Professor of Otolaryngology–Head and Neck Surgery at Boston University School of Medicine. He practices at an office in Chestnut Hill, providing advanced facial aesthetic surgery services.

1998

Completed the Harvard Otolaryngology Residency Program in 1998.

Wade W. Han, M.D., F.A.C.S., continues a facial plastic surgery practice in Florida. He was an invited speaker at the 2012 Advanced Endoscopic Nasal and Skull Base Surgery Conference in China, at the Eye & ENT Hospital of Fudan University.

1995

Completed a fellowship in Neurotology at Massachusetts Eye and Ear Infirmary in 1995.

Cliff Megerian, M.D., was recently appointed Chairman at Case Western Reserve University School of Medicine and University Hospitals Case Medical Center in Cleveland, Ohio. He was awarded the Richard and Patricia Pogue Endowed Chair in 2008.

1994

Completed the Harvard Otolaryngology Residency Program in 1994.

Judith White, M.D., Ph.D., was appointed Medical Director of the new Dizziness, Balance and Fall Prevention Center at Cleveland Clinic, a collaborative effort that includes otolaryngologists, audiology services, vestibular physical therapy, neurology, geriatrics, and vestibular diagnostic testing.

1993

Completed the Harvard Otolaryngology Residency Program in 1993.

Jeffrey E. Terrell, M.D., continues his rhinology practice at the University of Michigan and was recently appointed Associate Chief Medical Information Officer within the health system. Dr. Terrell is the founding CEO of a company called MeAndMyDocs.com, which allows specialists and hospitals to request, receive, and review patients’ imaging studies prior to their office visit or hospital transfer.

1986

Completed the Harvard Otolaryngology Residency Program in 1986.

John H. Krouse, M.D., Ph.D., was appointed Associate Dean for Graduate Medical Education at the Temple University School of Medicine, where he also serves as Professor and Chairman of the Department of Otolaryngology – Head and Neck Surgery.

1986

Completed the Harvard Otolaryngology Residency Program in 1986.

Robert L. Witt, M.D., F.A.C.S., practices general otolaryngology in Newark, Delaware. Dr. Witt was recently awarded an R01 grant from the National Institute of Dental and Craniofacial Research (NIDCR) as a principal investigator for his project titled, “Functional Assembly of Salivary Cells to Relieve Xerostomia.” He was also recently promoted to Professor of Otolaryngology at Thomas Jefferson University and Adjunct Professor in Biological Sciences at the University of Delaware.

1985

Completed the Harvard Otolaryngology Residency Program in 1985.

Mark C. Weissler, M.D., F.A.C.S., is the Joseph P. Riddle Distinguished Professor of Otolaryngology–Head and Neck Surgery and Chief of the Head and Neck Oncology Division at the University of North Carolina. He was recently elected as Vice Chair of the Board of Regents of the American College of Surgeons.

1980

Completed a research fellowship at Massachusetts Eye and Ear Infirmary in 1980.

Daniel Pender, M.S.E., M.D., F.A.C.S., is a faculty member of the Department of Otolaryngology at Columbia University. Dr. Pender recently published an article in the September 2012 issue of *Laryngoscope*, titled “A Toolbox of Geometric Elements for Labyrinth Model Design and Analysis.”

1979

Completed the Harvard Otolaryngology Residency Program in 1979.

Stuart H. Bentkover, M.D., F.A.C.S., practices facial plastic surgery in Worcester and Stoneham, Mass. He was recently appointed Chair of the Endowment Investment Committee for the American Academy of Facial Plastic and Reconstructive Surgery (AAFPRS) in 2012. He has also served as Chair of the Multimedia Committee for AAFPRS since 2003. He also had two significant publications this year.

1979

Completed the Harvard Otolaryngology Residency Program in 1979.

Jeffrey P. Harris, M.D., Ph.D., serves as Distinguished Professor and Chief of Otolaryngology/Head & Neck Surgery at the University of California at San Diego. He recently traveled to Rome to accept the

Shambaugh Prize at the Scientific Congress of the Collegium Otorhinolaryngologicum Amicitiae Sacrum (CORLAS). Dr. Harris was also the invited keynote speaker at the annual meeting of the Oto-Rhino-Laryngological Society of Japan, held in Niigata, Japan in May 2012.

1977

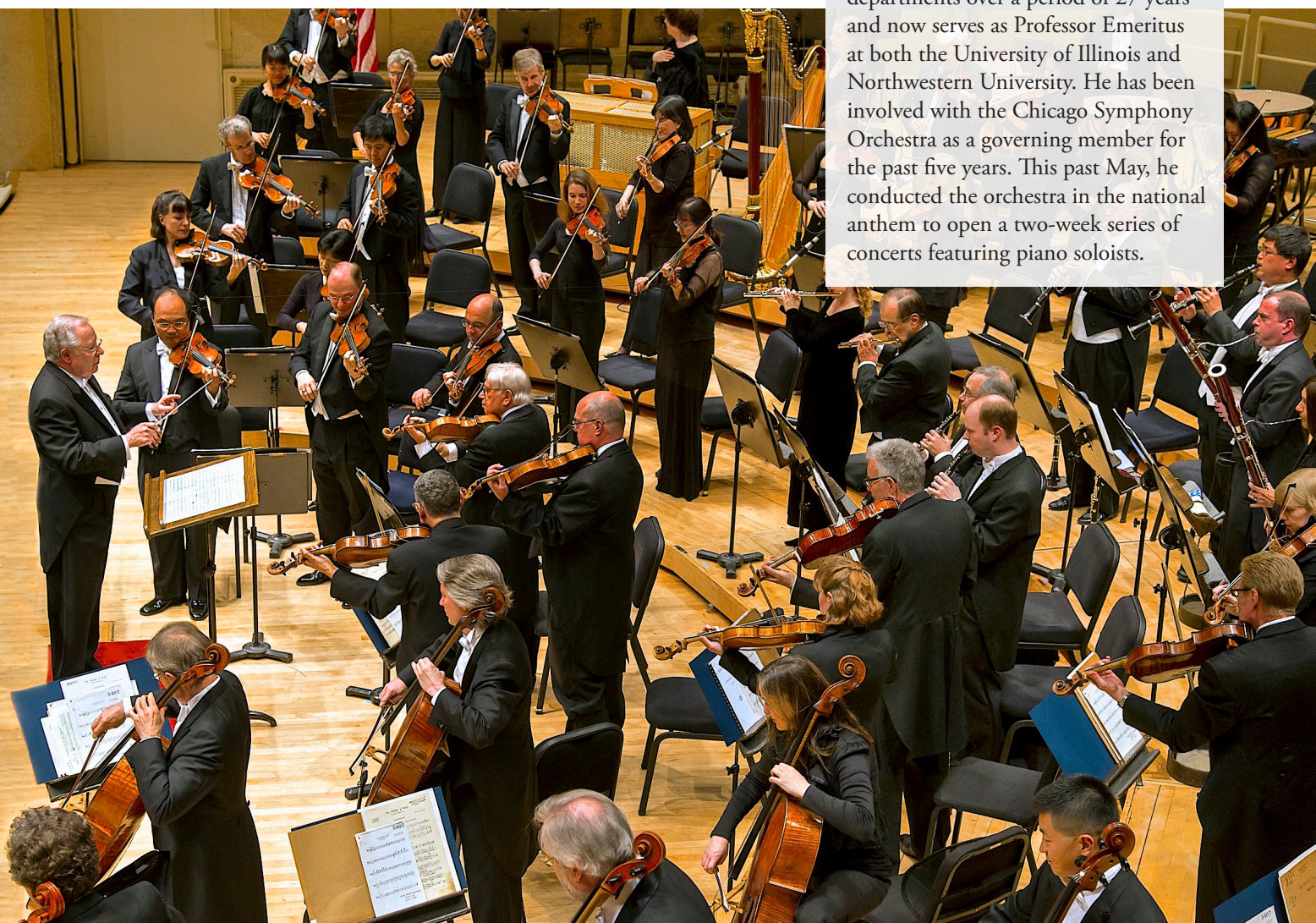
Completed the Harvard Otolaryngology Residency Program in 1977.

Michael Zoller, M.D., F.A.C.S., continues his general otolaryngology practice in Savannah, Georgia. This year he received the Community Star Award from Savannah Technical College. ■

1969

Completed the Harvard Otolaryngology Residency Program at Massachusetts Eye and Ear Infirmary in 1969.

Edward L. Applebaum, M.D., retired in 2007 after having chaired two departments over a period of 27 years and now serves as Professor Emeritus at both the University of Illinois and Northwestern University. He has been involved with the Chicago Symphony Orchestra as a governing member for the past five years. This past May, he conducted the orchestra in the national anthem to open a two-week series of concerts featuring piano soloists.





Under Construction

Otolaryngology Surgical
Training Laboratory



Photo by Garyfallia Pagonis.

Otolaryngology Surgical Training Laboratory will open doors in **January**

By SUZANNE DAY

The long-anticipated Otolaryngology Surgical Training Laboratory at Massachusetts Eye and Ear Infirmary is set to open in January 2013.

The state-of-the-art surgical skills training laboratory will advance instruction capabilities in nearly every subspecialty of otolaryngology, including: skull-base surgery, head and neck surgery, laser surgery, otology and neurotology, facial plastic and reconstructive surgery, sinus surgery, laryngology, and pediatric otolaryngology. The laboratory will serve as a resource for Harvard Otolaryngology residents and fellows, as well as experienced surgeons in the Department preparing for complex cases.

The need for a multidisciplinary training laboratory was first expressed after the Department began to outgrow the current facilities established by Harold F. Schuknecht, M.D., in 1961 to offer hands-on surgical skills training using cadaveric specimens of temporal bones to teach otologic surgery.

Gradually over the years, the Temporal Bone Dissection Laboratory expanded to include other subspecialty training, such as head and neck anatomy and surgical practice. Members of the faculty began to express interest in adding other training, but the Temporal Bone Dissection Laboratory is “limited in its capacity to service these other specialties,” said Joseph B. Nadol, Jr., M.D., chief and chairman of otolaryngology at Massachusetts Eye and Ear Infirmary and Harvard Medical School.

Additionally, that space includes only seven stations, which limits the number of trainees that can participate at one time. The new surgical training laboratory will offer 13 stations (one proctor station and 12 individual teaching stations).

As a surgical skills laboratory, the Otolaryngology Surgical Training Laboratory allows for instruction using anatomic, cadaveric human specimens. This is not to be confused with a simulation laboratory that uses sophisticated mannequins and computerized programming to simulate emergency situations, such as airway collapse or cardiac arrest.

“Both efforts [surgical training and simulation training] supplement each other, but one does not replace the other, and simulation is largely best-suited for situational problems,” Dr. Nadol said.

Planning for the new laboratory began about two years ago as part of a significant renovation of the third floor that will also include the construction of otolaryngology residents and fellows offices, an Eye Pathology training suite, and a renovated Sloane Conference Room. The project also includes an upgrade to the



audio-visual equipment of the Meltzer Auditorium and the Sloan Conference Room.

Those involved in initial planning for the laboratory were **Joseph B. Nadol, Jr., M.D.**, **Jean MacQuiddy**, and **Barbara Fullerton, Ph.D.**, from the Department of Otolaryngology, along with Robert Biggio and Elizabeth Sands from the Facilities Department. However, as planning advanced, all faculty members

will immensely enhance training for the Massachusetts Eye and Ear Infirmary community, as well as for other clinical training venues at the Harvard Medical School Department of Otolaryngology and Laryngology.

"We cooperate with Brigham and Women's Hospital, Boston Children's Hospital, and Beth Israel Deaconess Medical Center, and share residents with them. Certainly, it will be open

"The multi-disciplinary laboratory will immensely enhance training for the Massachusetts Eye and Ear Infirmary community, as well as for other clinical training venues at the Harvard Medical School Department of Otolaryngology and Laryngology."

in the Department of Otolaryngology were instrumental in contributing ideas and asserting the needs of various subspecialties, especially **Stacey Gray, M.D., F.A.C.S.**, representing the field of Rhinology; **Ramon Franco, Jr., M.D.**, for Laryngology; **Derrick Lin, M.D., F.A.C.S.**, and **Daniel G. Deschler, M.D., F.A.C.S.**, for Head and Neck Surgical Oncology; **Tessa A. Hadlock, M.D.**, and **Mack L. Cheney, M.D., F.A.C.S.**, for Facial Plastics; and **Christopher J. Hartnick, M.D.**, for Pediatric Otolaryngology.

Research staff was also influential in making recommendations on storage and preparation for handling cadaveric materials. In particular, **Diane Jones** and **Barbara Fullerton, Ph.D.**, the Department's resident anatomist, were especially contributory in this regard.

The multidisciplinary laboratory

for courses that the faculty at those institutions would like to put on as well," Dr. Nadol said.

The laboratory will be located on the third floor, near the Meltzer Auditorium and the newly renovated Sloane Conference Room and the otolaryngology residents' and fellows' office suite. The laboratory will feature one proctor station and 12 individual teaching stations, each equipped with video monitoring; surgical microscopes, drills, and other instruments; and DVD training videos. The laboratory will also be carefully equipped with support areas for preparation, storage, decontamination, and clean utility storage.

Teleconferencing facilities will enable live broadcast to conference rooms within the hospital and to physicians around the globe. The proctor station will be connected to each individual workstation with video screens and communication abilities. These areas connect to the operating room suites and to the Meltzer and Sloane rooms, which will allow instruction for a larger audience outside of the laboratory.

Massachusetts Eye and Ear Infirmary looks forward to the completion of this renovation project in mid-December, with the Otolaryngology Surgical Training Laboratory opening in January. ■

Thank you

John F. Ansley, M.D.
Barry J. Benjamin, M.D.
Nicolas Y. BuSaba, M.D., F.A.C.S.
Daniel G. Deschler, M.D., F.A.C.S.
Edward D. Donovan, M.D.
Frank P. Fechner, M.D.
Richard R. Gacek, M.D.
Stacey T. Gray, M.D., F.A.C.S.
Paul E. Hammerschlag, M.D., F.A.C.S.
Robert W. Jung, M.D.
Donald G. Keamy, Jr., M.D.
Robert E. Klotz, M.D.
Paul M. Konowitz, M.D., F.A.C.S.
John B. Lazor, M.D., M.B.A., F.A.C.S.
Daniel J. Lee, M.D., F.A.C.S.
Jon B. Liland, M.D.

Derrick T. Lin, M.D., F.A.C.S.
Robert H. Lofgren, M.D.
Andrew A. McCall, M.D.
Cliff A. Megerian, M.D.
Ralph B. Metson, M.D., F.A.C.S.
Joseph B. Nadol, Jr., M.D.
Daniel J. Pender, M.D., F.A.C.S.
Mitchell Ramsey, M.D.
Edward J. Reardon, M.D.
Michael B. Rho, M.D., F.A.C.S.
Jay T. Rubinstein, M.D., Ph.D.
Felipe Santos, M.D.
John J. Shea, Jr., M.D.
Herbert Silverstein, M.D., F.A.C.S.
Theodoros N. Teknos, M.D.

Many thanks to our alumni and faculty who contributed major gifts to this endeavor.



Highlights of the new ORL surgical training laboratory:

- Will advance instruction capabilities in nearly every subspecialty of otolaryngology, including skull-base surgery, head and neck surgery, laser surgery, otology and neurotology, facial plastic and reconstructive surgery, sinus surgery, laryngology, and general and pediatric otolaryngology.
- Will feature a proctor station and 12 individual teaching stations, each equipped with video monitoring, surgical microscopes, drills, and other instruments, and DVD training videos.
- Will offer teleconferencing facilities to enable live broadcast to conference rooms within the hospital and to physicians around the globe.

Graduation 2012

The Department of Otolaryngology at Harvard Medical School's class of 2012 graduated in a June 22nd ceremony at the Massachusetts Eye and Ear Infirmary. **Richard J. Wong, M.D., (OTO-'99)** Associate Professor of Otolaryngology at Weil Medical College at Cornell University, delivered the graduation address.

As part of the ceremony, a handful of trainees and faculty were awarded for their work in the program: **Jennifer L. Smullen, M.D.**, received the Montgomery Teaching Award, an honor bestowed upon a member of the faculty, as voted on by the residents. **Linda N. Lee, M.D.**, received the Chief Resident Teaching Award. **Aaron Tward, M.D., Ph.D.**, was awarded the Jeffrey P. Harris, M.D., Ph.D. Prize for Excellence in Research by a Graduating Resident. As part of the Resident Poster Session, **Josef Shargorodsky, M.D.**, won first prize and **Daniel Roberts, M.D.**, won second prize.

Residents:

Daniel Fink, M.D.

Medical School: Albert Einstein College of Medicine
Internship: Stony Brook University Hospital
Current: Laryngology Fellowship, University of California, San Francisco

David Jung, M.D., Ph.D.

Medical School: Harvard Medical School
Internship: Massachusetts General Hospital
Current: Neurotology Fellowship, Massachusetts Eye and Ear Infirmary/Harvard Medical School

Linda Lee, M.D.

Medical School: Baylor University School of Medicine
Internship: Beth Israel Deaconess Medical Center
Current: Facial Plastic and Reconstructive Surgery Fellowship, Johns Hopkins University

Harrison Lin, M.D.

Medical School: University of Southern California
Internship: Brigham and Women's Hospital
Current: Neurotology Fellowship, University of California, San Diego

Aaron Tward, M.D., Ph.D.

Medical School: University of California, San Francisco
Internship: Brigham and Women's Hospital
Current: Neurotology Fellowship, Massachusetts Eye and Ear Infirmary/Harvard Medical School



L-R: David Jung, M.D., Ph.D., Aaron Tward, M.D., Ph.D., Linda Lee, M.D., Harrison Lin, M.D., and Daniel Fink, M.D. | Photo by Jon Pack.

Boston Children's Hospital Fellows:

James L. Barrese, M.D., Pediatric Otolaryngology

Medical School: University of Illinois College of Medicine
Residency: University of Southern California
Current: Advanced Ear, Nose and Throat Care in Norwalk, CT.

Jacob R. Brodsky, M.D., Pediatric Otolaryngology

Medical School: University of Massachusetts Medical School
Residency: State University of New York Upstate, Syracuse
Current: Recruited as a full-time faculty and staff member at Boston Children's Hospital/Harvard Medical School.

harvard otolaryngology graduates

Stephen M. Kieran, M.B., B.Ch., Pediatric Otolaryngology

Medical School: University College Dublin

Residency: University College Dublin

Current: Otology Fellowship at the Medical University of South Carolina, Charleston.

Frank W. Virgin, M.D., Pediatric Otolaryngology

Medical School: Medical College of Georgia

Residency: University of Alabama, Birmingham

Current: Joined a practice with Vanderbilt University.

Massachusetts Eye and Ear Infirmary Fellows:

Marc W. Herr, M.D., Head and Neck/Microvascular

Medical School: Texas Southwestern Medical School

Residency: Tripler Army Medical Center

Current: Remains at Massachusetts Eye and Ear Infirmary/Harvard Medical School for a year of research.

Jihad Achkar, M.D., Laryngology

Medical School: American University of Beirut

Residency: American University of Beirut

Current: Joined an academic practice in Lebanon.

Jayme R. Dowdall, M.D., Laryngology

Medical School: Boston University School of Medicine

Residency: Wayne State University

Current: Joined the Laryngology Division at Massachusetts Eye and Ear Infirmary/Harvard Medical School.

Alicia M. Quesnel, M.D., Neurotology

Medical School:

Northwestern University Feinberg School of Medicine

Residency:

Massachusetts Eye and Ear Infirmary/Harvard Medical School

Current: Joined the Otology Division at Massachusetts Eye and Ear Infirmary/Harvard Medical School.

Jennifer Setlur, M.D., Pediatric Otolaryngology

Medical School:

New York University School of Medicine

Residency:

State University of New York Upstate, Syracuse

Current: Joined a practice with Connecticut

Pediatric Otolaryngology/Yale University.

Jonathan Y. Ting, M.D., Rhinology

Medical School: University of Western Ontario

Residency: Indiana University School of Medicine

Current: Joined a practice with Indiana University.

Arthur W. Wu, M.D., Rhinology

Medical School: Duke University School of Medicine

Residency: University of California at Los Angeles

Geffen School of Medicine

Current: Joined a practice with Cedars Sinai

Medical Center in Los Angeles.



L-R: James L. Barrese, M.D., Stephen M. Kieran, M.B., B.Ch., Frank W. Virgin, M.D., Jacob R. Brodsky, M.D. | Photo courtesy of Boston Children's Hospital.

Mohammed A. Al-Zahrani, M.D., Thyroid and Parathyroid Surgery

Medical School: King Saud University School of Medicine

Residency: King Abdulaziz Medical City

Current: Joined a practice at King Abdulaziz Medical City.

Congratulations, class of 2012! Please keep us updated on your latest accomplishments by sending news to the following address:
suzanne_day@meei.harvard.edu. ■

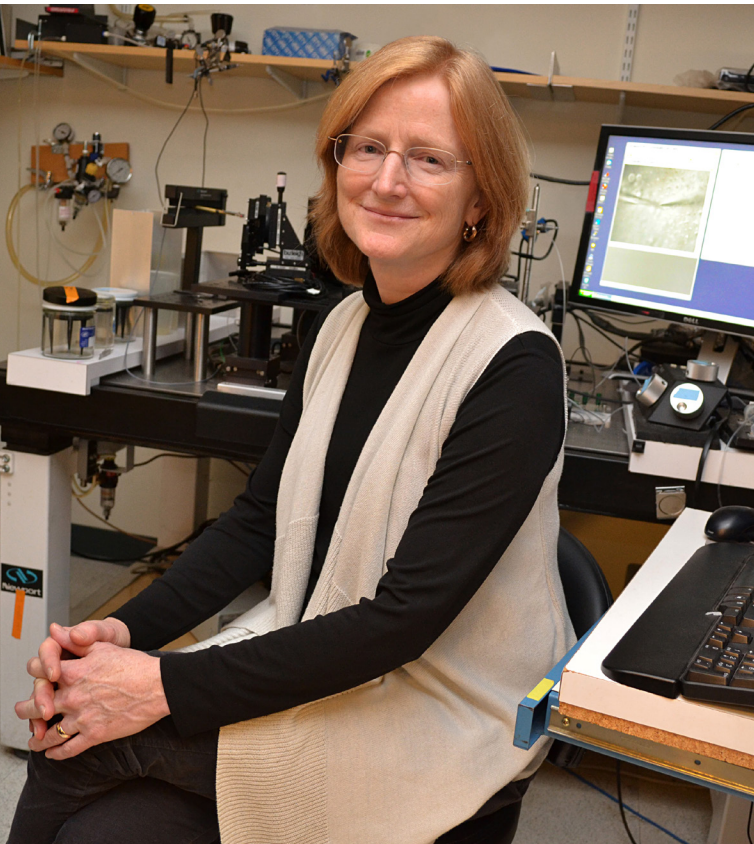


Back row L-R: Mohammed A. Al-Zahrani, M.D., Jennifer Setlur, M.D., Alicia M. Quesnel, M.D., Marc W. Herr, M.D., Arthur W. Wu, M.D., Jonathan Y. Ting, M.D., Front row L-R: Jayme R. Dowdall, M.D., Jihad Achkar, M.D. | Photo by Jon Pack.

Faculty Promotions

meet the new professors in the department of otology and laryngology at harvard medical school

Dr. Eatock | Photo by Garyfallia Pagonis.



The Department congratulates **Ruth Anne Eatock, Ph.D.**, and **Daniel M. Merfeld, Ph.D.**, on their promotions to Professors of Otology and Laryngology at Harvard Medical School this year.

Ruth Anne Eatock, Ph.D.

Dr. Eatock first joined the Department as a research fellow in auditory physiology

in the Eaton-Peabody Laboratories at Massachusetts Eye and Ear Infirmary and MIT in 1983. She previously completed her undergraduate training in neurobiology and earned her M.S. in Biology at McGill University in Montreal, and went on to earn her Ph.D. in Biology from the California Institute of Technology.

Upon completion of her training, Dr. Eatock accepted a full-time position at the University of Rochester, as an Instructor of Physiology, Neurobiology and Anatomy, and was later promoted to Assistant Professor at

that institution. From 1992 to 2006, she was a member of the Otolaryngology and Neuroscience faculty at Baylor College of Medicine, originally an Assistant Professor and working her way up to full Professor there. She was recruited to the Massachusetts Eye and Ear Infirmary in 2006 as an Associate Professor of Otology and Laryngology and Neurobiology.

Dr. Eatock is a neuroscientist

specializing in the biophysics of sensory cells and neurons of the inner ear. Her laboratory at the Infirmary uses the patch clamp method to measure and analyze electrical signals produced by individual hair cells and neurons of the inner ear, especially vestibular organs. She investigates how specific ion channels shape receptor potentials and nerve firing and how sensory signals are organized in the sensory epithelia and afferent nerves. She has made numerous discoveries in her field, including: characterization of sensory adaptation in hair cells (the first characterization in mammals), demonstration that developmental acquisition of specific ion channels is an important part of hair cell and neuronal differentiation in the inner ear, and development of in vitro preparations of mammalian vestibular inner ear organs for biophysical, molecular, and genetic studies.

An active participant in the research community, Dr. Eatock served as Editor-in-Chief of the *Journal of the Association for Research in Otolaryngology* from 2006 to 2011. She also served as Chair of the National Institutes of Health study section for Auditory research from 2002 to 2004, and Chair of the Gordon Research Conference on Gravitational Sensing in 2001. She was recently elected as Chair of the 2014 Gordon Research Conference on the Auditory System.

Dr. Eatock is a dedicated teacher and mentor to many students and trainees within her field. Specifically, she has supervised six graduate students and nine fellows who have gone on to pursue successful careers in biomedical academia.

Daniel M. Merfeld, Ph.D., M.S.E.

A native of Wisconsin, Dr. Merfeld studied mechanical engineering as an undergraduate at the University of Wisconsin-Madison prior to earning his masters in mechanical and aerospace engineering at Princeton University in 1985. He went on to earn his Ph.D. in biomedical engineering at the Massachusetts Institute of Technology in 1990. He remained at MIT for



Dr. Merfeld on a motion platform device. | Photo by Garyfallia Pagonis.

post-doctoral training and a subsequent Research Scientist position at the prestigious Man-Vehicle Laboratory from 1990 to 1995. In 1995, he accepted a Scientist position at the Neurological Sciences Institute.

Dr. Merfeld returned to the Boston area in 1999 as Associate Professor of Otolaryngology at Harvard Medical School. An accomplished neuroengineer/psychophysicist, Dr. Merfeld is the founding Director of the Jenks Vestibular Physiology Laboratory.

Performing basic and translational research concerning the vestibular system, Dr. Merfeld has shown that tilt and translation perception result from multi-sensory signal convergence via internal models. He and his colleagues were also the first to develop vestibular implants as a treatment for balance disorders, a technology that is now being developed by other institutions. His research has been funded by the National Institutes of Health for 15 consecutive years.

An active member of the national research community, Dr. Merfeld has chaired one NIH grant review panel, and has served as a reviewer on more than 15 others. He will serve as a member of the Sensorimotor Integration study section through 2018. An authority on vestibular prosthetics, he was an invited speaker at the National Institute on Deafness and Communication Disorders Advisory Council on vestibular prosthetics in 2003, at the NIH Neural Prosthetic Workshop in 2003, and at the NIDCD Workshop on Electrical Stimulation of the Vestibular Nerve in 2004. Dr. Merfeld holds eight patents, six of which have been licensed by a commercial entity.

A dedicated teacher and mentor, Dr. Merfeld organizes and teaches “Physiological System Analysis,” a required engineering class for Harvard bioengineering undergraduates. He also initiated and organized the Harvard-MIT Health Sciences and Technology Program course “Sensory-Neural Systems: Spatial

Orientation from Vestibular End Organs to Behavior and Adaptation,” for which he now serves as a visiting lecturer. He has served as mentor to numerous post-doctoral fellows and has supervised two MIT Ph.D. theses. He also co-authored an undergraduate textbook, *Sensation and Perception*, which includes a complete chapter on the vestibular system.

While continuing his translational work on vestibular implants and treatment, Dr. Merfeld’s most recent research focuses on vestibular thresholds and understanding how the brain processes information in the presence of vestibular noise. He hopes to improve diagnostic technology for disorders of the vestibular system. ■

2012 Promotions

Professor

Ruth Anne Eatock, Ph.D.
Daniel M. Merfeld, Ph.D., M.S.E.

Associate Professor

Ramon A. Franco, Jr., M.D.
Derrick T. Lin, M.D., F.A.C.S.
James W. Rocco, M.D., Ph.D.

Assistant Professor

Hideko Heidi Nakajima, M.D., Ph.D.

Instructor

(promoted from training status)

Jayne R. Dowdall, M.D.
Faisal Karmali, Ph.D.
Alicia M. Quesnel, M.D.
Jocelyn Songer, Ph.D.
Bo Wen, Ph.D.

In Memoriam

Saamil N. Merchant, M.D., the Gudrun Larsen Eliassen and Nels Kristian Eliassen Professor of Otolaryngology and Laryngology at the Harvard Medical School and at the Massachusetts Eye and Ear Infirmary, passed away on June 29, 2012. Dr. Merchant was a world-renowned clinical otologist, otopathologist, teacher, and research scholar.

Born in Bombay, India on Sept. 29, 1960, Dr. Merchant received his undergraduate degree at the Ramnarain Ruia College and his medical degree from the Seth GS Medical College at the University of Bombay. He went on to train in otolaryngology at the College of Physicians and Surgeons of Bombay and earned his masters of science in otolaryngology at the University of Bombay.

Dr. Merchant came to the Massachusetts Eye and Ear Infirmary in 1986 to train as a research fellow in otolaryngology. Shortly thereafter, he decided to repeat his residency training in otolaryngology in the United States, and was accepted to the Harvard Otolaryngology residency program at the Infirmary.

After completing his training, Dr. Merchant was recruited to the Otolaryngology division in the Department of Otolaryngology at the Massachusetts Eye and Ear Infirmary in 1992, where he quickly gained recognition as an exceptional member of the Department. He was appointed as the first Eliassen Professor in the Department of Otolaryngology and Laryngology at Harvard Medical School in 2007.

In addition to his clinical practice of otology, Dr. Merchant was devoted to research and teaching. He served as co-director of the Wallace Middle Ear Research Unit with his colleague and friend, John Rosowski, Ph.D. In this effort, they systematically established the scientific basis for much of the

reconstructive surgery that is done in chronic ear disease and stapes surgery.

His other research passion was the study of the pathology of the human temporal bone. He served as Director of the Otopathology Laboratory and did much to enhance the methodology by which human temporal bone pathology is studied, including the application of genomic and proteomic analysis. He was highly innovative in developing a computerized database to store, analyze, and retrieve data that includes images that he made available to the scientific community on an international basis. He served as a co-principal investigator on the NIDCD Temporal Bone Hearing and Balance Pathology Resource Registry, and his research has been consistently supported by NIH funding over the years, a clear testament to the high regard in which his research work was held. His outstanding work earned him the Pulitzer prize for the best paper, awarded by the Pulitzer Society in 1999. In 2004, Dr. Merchant was elected as a member of the Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum as part of the U.S. delegation. He has given numerous named lectureships, including to the Royal Society of Medicine in London, annual memorial lectures at McGill University, the University of Chicago, and the Ben Senturia Lecture at Washington University.

Dr. Merchant was an outstanding teacher at all levels of training, including medical students, graduate students, residents in the Harvard Otolaryngology program, and clinical and research fellows. He received the William W. Montgomery Award for Excellence in Teaching in 2000, as voted on by that year's graduating resident class.

In his clinical practice, he successfully applied the principles of mechanics studied in the laboratory to middle ear reconstruction. Through his temporal

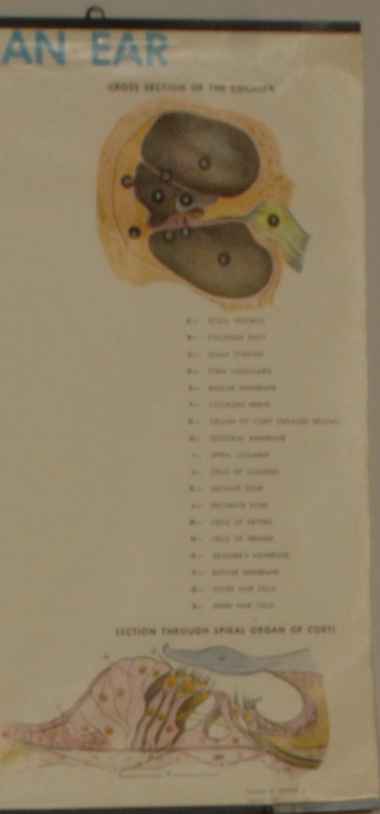
bone histopathology studies, he added clarity and seminal information to the pathogenesis, diagnosis, and management of several otologic disorders.

He served as President of the Medical Staff of the Infirmary from 2006-2007. He also served as both secretary/treasurer and as a member of the Nominating Committee of the International Otopathology Society (Schuknecht Society). He was a member of the American Academy of Otolaryngology-Head and Neck Surgery, Politzer Society, American Otological Society, Executive Council of the American Neurotology Society, the Association for Research in Otolaryngology, and the American Laryngological, Rhinological, and Otological Society (Triological Society). Dr. Merchant served on the editorial board of a number of distinguished journals in our specialty. He was the recipient of the Presidential Citation from the American Otologic Society in 2009 and the recipient of the Honor Award from the American Academy of Otolaryngology-Head and Neck Surgery in 2009 for his exceptional service in its scientific programs, exhibits, continuing education and instructional courses. He was a member of the Advisory Council of the National Institutes of Deafness and Other Communication Disorders.

Dr. Merchant's scholarly contributions included more than 140 articles in the peer-reviewed literature, most of which were seminal contributions based on his work on middle ear mechanics and the pathology of the ear. One of his greatest contributions to the literature was as editor of the third edition of *Schuknecht's Pathology of the Ear*, published in 2010.

Dr. Merchant was a remarkable colleague, physician, and friend who willingly gave his time and expertise to all. The Department has recently commissioned an artist to paint a portrait of Dr. Merchant to hang in the Infirmary hallways in his memory. ■

Michael J. McKenna, M.D., Joseph B. Nadol, Jr., M.D., and Mary Leach in Public Affairs contributed to this story.



HARVARD

*An annual update from the
Department of Otology and Laryngology
at Harvard Medical School.*

Otolaryngology

243 Charles Street, Boston, MA 02114

Drs. Tward and Nadol | Photo by Garyfallia Pagonis.

