CURRICULUM VITAE

George B. Wanna, M.D.

Department of Otolaryngology-Head and Neck Surgery

Division of Neurotology

The Bill Wilkerson Center for Otolaryngology & Communication Sciences

7209 Medical Center East · South Tower

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Nashville, Tennessee 37232-8605

CURRICULUM VITAE

GEORGES BOULOS WANNA, M.D.

PERSONAL INFORMATION

Business Address: Vanderbilt Office:

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Department of Otolaryngology-Head & Neck Surgery

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E-Mail: <u>george.wanna@vanderbilt.edu</u>

Date of Birth: February 1, 1973

EDUCATION

Medicine: Doctor of Medicine

Lebanese University Beirut, Lebanon

June 1998

POST-GRADUATE TRAINING

Residency: Otolaryngology

Sacred Heart University Hospital

Baabda-Lebanon/ Paul Sabatier University

Toulouse, France

1998-2002

Otolaryngology

Mt. Sinai Medical Center New York, New York

2003-2008

Fellowship: Postdoctorate Research Fellow in Neurotology

Department of Otolaryngology

Columbia University New York, New York

2002

Otology/Neurotology Fellow Department of Otolaryngology

CHU Purpan Toulouse, France 2002-2003

Neurotology/Skull Base Fellow The Otology Group of Vanderbilt

1215 21st Avenue South

7209 Medical Center East-South Tower Nashville, Tennessee 37232-8605

2008-2010

<u>LICENSURE</u> Tennessee

2010-Present

License Number: MD45898

BOARD CERTIFICATION Diplomate, American Board of Otolaryngology, 2009

Diplomate, American Board of Otolaryngology [Neurotology], 2011

ACADEMIC APPOINTMENTS

Assistant Professor Vanderbilt Bill Wilkerson Center for Otolaryngology and Communication Sciences Vanderbilt University School of Medicine 2010-Present

Associate Program Director, Neurotology Fellowship Vanderbilt Bill Wilkerson Center for Otolaryngology and Communication Sciences Vanderbilt University School of Medicine October 2011-Present

HOSPITAL APPOINTMENTS

2010-Present Vanderbilt University Medicine Center

1211 Medical Center Drive

Nashville, Tennessee 37232-0002

Full-Time Faculty

2010-Present Monroe Carell Jr. Children's Hospital at Vanderbilt

2200 Children's Way

Nashville, Tennessee 37232

Full-Time Faculty

2010-Present St. Thomas Hospital

4220 Harding Road

Nashville, Tennessee 37205

Active Staff

2010-Present St. Thomas Surgicare

4230 Harding Road

Nashville, Tennessee 37205

Active Staff

HONORS AND AWARDS

2001 First Prize for Resident Research Day Symposium, Lebanon

Lebanese experience of cochlear implant.

2002 Best presentation at GEMO Meeting, France

Malignant Otosclerosis: Stapedotomy or Cochlear Implant?

2005 Travel Grant, American Academy of Otolaryngology-Head & Neck Surgery

2005 Nominee for Best Physician at Mt. Sinai Hospital – NYC

2006 1st Prize, First Metropolitan New York Resident Research Day Symposium

"Interleukin-12 Expression Enhances Vesicular Stomatitis Virus Oncolytic

Therapy in Murine Squamous Cell Carcinoma"

PROFESSIONAL ORGANIZATIONS

2006-Present American Academy of Otolaryngology-Head & Neck Surgery

2011-Present American Neurotology Society

ACADEMIC ACTIVITIES

- Lecturer, Basic Science Lecture, Otolaryngology Residents
 - o "Treatment of Balance Disturbances," October 2009
 - o "Otosclerosis," September 2010
 - o "Chronic Ear Disease," November 2010
 - o "Facial Nerve Disorders," November 2010
- Lecturer, Resident Lecture Series, Neurotology Fellows and Faculty
 - o "Classification of Cholesteatoma," March 2010
 - o "Management of Acoustic Neuroma," July 2010
 - o "Research Update," October 2010
 - o "Otosclerosis and Imaging," March 2011
 - o "Radiosurgery for Acoustic Neuroma," August 2011

VISITING PROFESSORSHIPS

The Faculty of Medical Sciences Lebanese University Beirut, Lebanon Guest Speaker, Resident Graduation July 2010 Guest Speaker Department of Otolaryngology Grand Rounds Mt. Sinai Medical Center New York, New York November 2010

INSTRUCTIONAL COURSES - FACULTY

- Instructor, American Academy of Otolaryngology-Head and Neck Surgery
 - o "Current Trend in the Management of Sudden Hearing Loss," September 13, 2011
 - o "Chronic Ear Disease: Surgical Decisions and Techniques," September 14, 2011
- Instructor, Temporal Bone Course, The Otology Group of Vanderbilt
 - o October 9-11, 2008
 - o October 15-17, 2009
 - o October 14-16, 2010

INVITED PRESENTATIONS

2009 American Hearing Association

"Cochlear Implant in 2009"

Nashville, Tennessee

2010 Blanchfield Army Community Hospital

"Chronic Ear Disease" Ft. Campbell, Kentucky December 9, 2010

2011 Tennessee Hearing Association

"Bridging the Gap Between Hearing Aids and Cochlear Implants"

May 14, 2011

Pigeon Forge, Tennessee

Vanderbilt University Medical Center Department of Hearing & Speech

"Vertigo"

August 3, 2011

Harton Regional Medical Center "Conductive Hearing Loss"

Tullahoma, Tennessee

September 8, 2011

2011 Annual Meeting & AAO EXPO

"Current Trend In The Management Of Sudden Hearing Loss"

"Avoiding Complications In Chronic Ear Surgery"

San Francisco, CA

September 9-14, 2011

NATIONAL RESEARCH PROGRAMS

- Clinical Validation of Percutaneous Petrous Apex Approach, 2010-present
- Correlation of MicroCT and Histology for Electrodes Position in Cochlear Implant, 2010-present
- Intratympanic Steroid in Meniere's Disease: Prospective Study; 2010-present
- Management of CSF Leak in Vestibular Schwannoma, 2010-present
- Correlation of Intraoperative ABR and Hearing Outcome, 2008-2009
- Outcome of Bilateral Cochlear Implant, 2010-present

NATIONAL RESEARCH PROGRAMS (Continued)

- Hearing Outcome in Conservative Management of Vestibular Schwannoma, 2009
- Reconstructing the Canal after Wall-Down Mastoidectomy , 2006-2007
- Interleukin-12 Expression Enhances Vesicular Stomatitis Virus Oncolytic Therapy in Murine Squamous Cell Carcinoma, 2005-2006
- Combined Mutant VSV with Radiation and/or Chemotherapy for Treatment of Squamous Cell Carcinoma of Head and Neck in Mice.(submitted for grant), 2005-2006
- 41 BBL Enhances Adenovirus/VSV-Mediated IL-12 Gene Therapy in Murine Squamous Cell Carcinoma, 2005-2006
- Three-Dimensional CT Scanning of the Temporal Bone, 2005

POSTGRADUATE COURSES ATTENDED

- Linac Radiosurgery Course for Certification
 - o May 2010, Chicago IL
- Envoy Esteem® Course on Middle Ear Implants
 - o August 2010, Minneapolis MN
 - o November 2010, Minneapolis MN
- Anspach Skull Base Course
 - o November 2010, Palm Beach Gardens FL
- The Maxum System Course on Middle Ear Implants
 - o January 2011, Houston TX

PRESENTATIONS

American Academy of Otolaryngology-Head & Neck Surgery

- 2007 "Reconstructed Wall-Down Mastoidectomy", Washington D.C.
- 2009 "Resident and Fellow Education in Otology and Neurotology," San Diego, California
- 2010 "Evaluation of Second Looks for Pediatric Cholesteatomas," Boston, Massachusetts
- 2011 "Type of Electrodes Insertion and Hearing Preservation Outcome," San Francisco, California

Combined Otolaryngological Spring Meetings (COSM)

- 2005 "Genetically Modified Fibers in Ad Virus-Enhanced Transduction." Boca Raton, Florida
- 2006 "VSV-Il12 in vivo Treatment for SCCHN," Chicago, Illinois
- 2009 "Spontaneous Otogenic Posterior Fossa Pneumocephalus. Case Report and Review of the Literature," Phoenix, Arizona
 - "Contemporary Management of Intracranial Complications of Otitis Media," Phoenix, Arizona
 - "Percutaneous Access of Petrous Apex *in vitro* Using Customized Drill Guides Based on Image-Guided Surgical Technology," Phoenix, Arizona

- 2010 "Assessment of Electrode Localization and Audiologic Outcome in Bilateral Cochlear Implant Patients," Las Vegas, Nevada
- 2011 "Functional Facial Nerve Outcomes in Facial Nerve Schwannomas," Chicago, Illinois "Management of CSF Leaks following Vestibular Schwannoma Surgery," Chicago, Illinois "Trends in Management of Glomus Jugulare from 1970-2010," Chicago, Illinois "Canal Wall Reconstruction in the Surgical Management of Cholesteatoma," Chicago, Illinois

Francophone Meeting

2000 "Recurrent Nerve Stimulation in Thyroidectomy," Beirut, Lebanon

2003 "Cholesteatoma in Children: Surgical Strategy and Classification," Quebec, Canada

GEMO Meeting

2003 "Cochlear Implant: Past, Present and Future," Bordeaux, France

International College of Surgeons

2001 "Cochlear Implant," Beirut, Lebanon

North American Skull Base Society

2011 "Microsurgical Anatomy of the Cochlea in the Extended Middle Fossa Approach,"

Scottsdale, Arizona

Otology and Neurotology National Meeting

2002 "Middle Ear Implant and Cochlear Implant," Toulouse, France

2003 "Otosclerosis and Imaging," Paris, France

CURRENT RESEARCH

Principal Investigator

- Cost of Stapes Surgery with Laser vs. No Laser and Outcome Analysis; 01/25/2011
- Pediatric Assessment of Electrode Placement and Audiologic Outcomes in Bilateral Cochlear Implantation; 12/30/2010
- Current Trends in Management of Glomus Jugulare; 10/12/2010
- Evaluation of Facial Nerve Schwannomas; 10/07/2010
- Pleomorphic Adenoma in the External Auditory Canal: A Case Report; 09/30/2010

Co-Investigator

- Functional Outcomes in Patients Treated with LINAC-based Fractionated Stereotactic Radiotherapy for Acoustic Neuroma (PI-Tony Cmelak); 12/17/2010
- Intratympanic Steroid Injection in the Treatment of Meniere's Disease (PI-Marc Bennett); 07/23/2010
- Pediatric Percutaneous Cochlear Implantation: In-Vivo Validation of Technique (PI-Robert Labadie); 05/12/2010
- Mastoid Bone Drilling Using Miniature Drill Press (PI-Robert Labadie); 09/29/2009
- Improving the Quality and Utility of The Otology Group of Vanderbilt's Record-Keeping System by Developing Software that Both Consolidates Patient Records from Vanderbilt and St. Thomas Hospitals into a Single Database and Also Helps Physicians Better Track and Analyze Patient Outcomes (PI-Michael Glasscock); 09/16/2009
- Clinical Validation and Testing of Percutaneous Cochlear Implantation (NIH: NIDCD, PI-Robert Labadie). 1R01DC008408-02, (2.5% effort); 04/01/2007-03/31/2011
- Less invasive, safer, and more accurate access to surgical sites within the skull can be achieved by combining image-guided surgical techniques and miniature parallel robots directly attached to the bone. This represents an extreme paradigm shift from the current imprecise manual procedures where both safety and efficacy fundamentally rely on human hand-eye coordination and memory (PI: Webster); 7/1/2011 6/30/2016

Faculty Advisor

Use of MRI in Predicting Need for Second-Look Cholesteatoma Surgery, (faculty advisor, 1.5% effort; PI-Betty Tsai); 7/11/2011 – 6/30/2012

PUBLICATIONS: BOOK CHAPTERS

- 1. JJ. Pessey, O. Deguine, **G. Wanna**. ENT pathologies after explosion. Encyclopedie Medico Chirurgicale. EMC 2004 (20-910-A-10)
- 2. **Wanna** G, Smouha E. Vertigo: The New Encyclopedia of Neuroscience, edited by Larry Squire et al, Elsevier, 2008.
- 3. Chaboki H, **Wanna G,** Weistrich R, Kao J, Packer S, Lawson W. Nasal cavity and paranasal sinus carcinoma: Head and Neck Cancer: An Evidence-Based Team Approach, 2008.

PUBLICATIONS: PEER-REVIEWED JOURNALS

- 1. Saliba I, Moukheiber A, **Wanna G**, Moukarzel N, Nehme A, Mansour S. Hearing preservation mastoidectomy in otogenic meningitis secondary to an enlarged vestibular aqueduct. Case report. *J Med Liban* 2000 Sep-Oct;48(5):327-32.
- 2. Fayad JN, **Wanna G**, Micheletto JN, Parisier SC. Facial nerve paralysis following cochlear implant surgery. *Laryngoscope* 2003 Aug;113(8):1344-6.
- 3. Calmels MN, Saliba I, **Wanna G**, Cochard N, Fillaux J, Deguine O, Fraysse B. Speech perception and speech intelligibility in children after cochlear implantation. *Int J Pediatr Otorhinolaryngol* 2004 Mar; 68(3):347-51.
- 4. Saliba I, Calmels MN, **Wanna G**, Iversenc G, James C, Deguine O, Fraysse B. Binaurality in middle ear implant recipients using contralateral digital hearing aids. *Otology & Neurotology* 26(4):680-685, July 2005
- 5. Shin E, **Wanna G**, Choi B, Aguilla D, Ebert O, Genden E, Woo S. Interleukin-12 expression enhances vesicular stomatitis virus oncolytic therapy in murine squamous cell carcinoma. *Laryngoscope* 2007 Feb; 117(2): 210-214.
- 6. Shin E, Chang J, Choi B, **Wanna G**, Ebert O, Genden E, Woo S. Fusogenic vesicular stomatitis virus for the treatment of head and neck squamous carcinomas. *Otolaryngol Head Neck Surg* 2007 May;136(5):811-7.
- 7. Calmels MN, Viana C, **Wanna G**, James C, Deguine O, Fraysse B. Very far advanced otosclerosis: Stapedotomy vs cochlear implant. *Acta Otolaryngol* 2007 Jun;127(6):574-8.
- 8. Kwang S, Choi B, **Wanna G**, Genden E, Shin E. Combined VSV oncolytic virus and chemotherapy for squamous cell carcinoma. *Laryngoscope* 2008 Feb;118(2):237-42.
- 9. Mukhija V, Kwang Sung, Desai S, **Wanna G**, Genden E. Transoral Robotic-Assisted Free Flap Reconstruction. *Otolaryngology-Head and Neck Surgery* 2009 Jan;140(1):124-5.
- 10. Haynes D, Jadrien Y, **Wanna G**, Glasscock M. Middle ear implantable hearing devices: An overview. *Trends Amplif* 2009 Sep;13(3):206-14.
- 11. **Wanna G,** Balachandran R, Majdani O, Mitchell J, Labadie R. Percutaneous access of petrous apex *in vitro* using customized drill guides based on image-guided surgical technology. *Acta Otolaryngol* Apr 2010, Vol. 130, No. 4, Pages 458-463: 458-463.
- 12. **Wanna G**, Young JA, Swanson E, Haynes D. Spontaneous otogenic posterior fossa pneumocephalus. *Otolaryngol Head Neck Surg.* 2010 Oct;143(4):593-4.

- 13. Schuman TA, Noble JH, Wright CG, **Wanna G**, Dawant B, Labadie RF. Anatomic verification of a novel method for precise intrascalar localization of cochlear implant electrodes in adult temporal bones using clinically available computed tomography. *Laryngoscope* 2010 Nov: 120 (11):2277-2283.
- 14. Wanna G, Noble J, McRackan T, Dietrich M, Rivas A, Schuman T, Labadie R. Assessment of electrode placement and audiologic outcomes in bilateral cochlear implantation. (In press. Otology-Neurotology)
- 15. **Wanna G,** Dharamsi L, Moss J, Bennett M, Thompson R, Haynes DS. Contemporary management of intracranial complications of otitis media. *Otol Neurotol* 2010 Jan. 31(1):111-7.
- McRackan T, Abdellatif WM, Wanna GB, Rivas A, Gupta N, Dietrich MS, Haynes DS. Evaluation of second-look procedures for pediatric cholesteatomas. Otolaryngol Head Neck Surg 2011 Jul;145(1):154-60.
- 17. **Wanna G**, Gifford R, McRackan T, Rivas A, Haynes D. Bilateral Cochlear Implantation. *Otolaryngology Clinics of North America, in press*
- 18. Rivas A, **Wanna G**, Haynes D. Complications of Cochlear Implants. *Otolaryngology Clinics of North America, in press*
- 19. Mangus B, Rivas A, Yoo M, Alvarez J, **Wanna G**, Haynes D, Bennett M. Management of CSF leak following Vestibular Schwannoma Surgery. *Otology-Neurotology, in press.*
- 20. McRackan T, Rivas A, Wanna G, Haynes D. Functional Facial Outcomes in Facial Schwannoma. *Otology-Neurotology, in press.*