



## **CURRICULUM VITAE**

Theodore H. Schwartz, M.D., F.A.C.S.  
(h-index: 86)

Date of CV Preparation: December 18, 2023

### **A. GENERAL INFORMATION**

Current Title: Professor of Neurosurgery, Otolaryngology and Neuroscience  
David and Ursel Barnes Endowed Professor of Minimally Invasive  
Neurosurgery  
Vice Chairman, Clinical Research  
Director, Anterior Skull Base and Pituitary Surgery  
Co-Director, Surgical Neuro-Oncology  
Director, Epilepsy Surgery and Research Laboratory

Office address: Department of Neurosurgery  
Weill Cornell Medical College  
New York Presbyterian Hospital  
525 East 68<sup>th</sup> Street  
STARR-651 – Box 99  
New York, NY 10021

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Country of Citizenship: USA

**Optional information:**

Birth date: Upon request

Birthplace: New York, New York

Social Security Number: Upon request

Marital Status: Married

Children: 4

**B. EDUCATIONAL BACKGROUND**

A.B.	Harvard College, Cambridge, MA	6/83-5/87	1987
M.D.	Harvard Medical School, Boston, MA	9/88-5/93	1993

**Continuing Education**

Imaging Structure and Function in the Nervous System	Cold Spring Harbor	1996
Advanced Skull Base Anatomy	Allegheny Hosp., P.A.	1996
Microsurgical Techniques	Columbia-Presbyterian, N.Y.	1996
Epilepsy: Basic Mechanisms	American Epilepsy Society	1997
Brain Imaging	Society for Neuroscience	1997
Gamma Knife Radiosurgery	Univ. of Pittsburgh	2001
Endoscopic Pituitary Surgery	Bologna, Italy	2004
Fluorescence-Guided Tumor Resection	Emory, Atlanta	2012
Gleolan Neurosurgery Training Program Online		2018
Stereo-EEG: Techniques	Zimmer Biomet, NJ	2018

**C. PROFESSIONAL POSITIONS AND EMPLOYMENT**

**Post-doctoral training**

Graduate Research Fellow	U. of Washington, Seattle, WA	7/92-6/93
Intern, General Surgery	Columbia Presbyterian Hospital, NY	7/93-6/94
Residency, Neurosurgery	NY-Presbyterian Hospital (Columbia), NY	7/94-6/98
Chief Resident, Neurosurgery	NY-Presbyterian Hospital (Columbia), NY	7/98-6/99
Research Fellow, Neurology	New York University, NYC	7/96-6/97
Post-Doc, Neurobiology	Columbia University, NYC	7/96-6/97
Post-Doc, Neurobiology	Max-Planck Institute, Munich, Germany	6/99-12/99
Epilepsy/Brain Tumor Fellowship	Yale-New Haven Hospital, New Haven, CT	1/00-6/00

**Academic positions**

Assistant Professor of Neurosurgery and Neuroscience UMDNJ-NJ Med School, Newark, NJ	2000-01
Adjunct Associate Research Scientist in Biology Columbia University, NYC	2000-02
Assistant Professor of Neurosurgery Weill Med College of Cornell U., NY	2001-05
Adjunct Assistant Professor of Neurosurgery Columbia U. Coll. of Phys. And Surgeons	2002-05
Assistant Professor of Neurological Surgery in Neurology and Neuroscience Weill Med College of Cornell U., NY	2004-05
Associate Professor of Neurosurgery Weill Cornell Med College of Cornell U., NY	2005-09
Associate Professor of Neurological Surgery in Neurology and Neuroscience Weill Cornell Med College of Cornell U., NY	2005-09
Associate Professor of Neurological Surgery in Otorhinolaryngology Weill Cornell Med College of Cornell U., NY	2008-09
Professor of Neurosurgery Weill Cornell Med College of Cornell U., NY	2009-present
Professor of Neurological Surgery in Otorhinolaryngology Weill Cornell Med College of Cornell U., NY	2009-present
Professor of Neurological Surgery in Neuroscience Weill Cornell Med College of Cornell U., NY	2009-present
David and Ursel Barnes Endowed Professor of Minimally Invasive Neurosurgery Weill Cornell Med College of Cornell U., NY	2014-present
Vice-Chairman of Clinical Research, Department of Neurosurgery Weill Cornell Med College of Cornell U., NY	2019-present

### **Hospital positions**

Chief, Division of Neurosurgery	Jersey City Med Ctr, Jersey City, NJ	2000-01
Chief, Division of Neurosurgery	St. Barnabas Hospital, Bronx, NY	2001-02
Assistant Attending Neurosurgeon	New York-Presbyterian Hospital, NY	2001-05
NYP Hospital Consultant	Hospital for Special Surgery, NY	2002-2015
Orthopaedic Surgery/Neurosurgery		
Associate Attending Neurosurgeon	New York-Presbyterian Hospital, NY	2005-09
Attending Neurosurgeon	New York-Presbyterian Hospital, NY	2009-present
Attending Neurosurgeon	Overlook Hospital, NJ	2007-present
Attending Neurosurgeon	St. Barnabas Hospital, NJ	2017-present

### **Employment**

Consultant Neurosurgeon	The Brooklyn Hospital, Brooklyn, NY	2001-07
Consultant Neurosurgeon	St. Barnabas Nursing Facility, Bronx, NY	2001-07
Consultant Neurosurgeon	Westchester Square Med Ctr, Bronx, NY	2002-04
Consultant Neurosurgeon	New York Hospital Queens, Queens, NY	2002-07
Consultant Neurosurgeon	Lennox Hill Hospital, NY	2006-08

Consultant Neurosurgeon	Overlook Hospital, NJ	2007-present
Consultant Neurosurgeon	St. Barnabas Hospital, NJ	2017-present

**D. LICENSURE, BOARD CERTIFICATION, MALPRACTICE**

**Licensure**

NYS	218102	Issued 6/30/00	Expires	4/30/20
NJ	25MA07117700	Issued 5/12/09	Expires	6/30/20
DEA number:	BS6995748		Expires	2/28/21
Board Certification:	American Board of Neurological Surgery		Expires	12/31/22
Malpractice Insurance:	MCIC Vermont, Inc.			
Premiums paid by:	NY-PH/WMC of Cornell U.			

**E. PROFESSIONAL MEMBERSHIPS**

Member	American Medical Association	1993
Member	New York Medical Society	1994
Member	Congress of Neurological Surgery	1995
Member	American Association of Neurological Surgery	1995
Member	American Epilepsy Society	1997
Member	Society for Neuroscience	1997
Member	Society for Neuro-oncology	1998
Associate	American College of Surgeons	2003
Member	New York Society for Neurosurgery	2003
Fellow	American College of Surgeons	2004
Member	The Medical Strollers	2005
Member	Physician's Scientific Society	2005
Member	North American Skull Base Society	2005
Member	The Hospital Graduates	2007
Member	Cornell Alumni Council	2008
Member	Neurosurgical Society of America	2008
Member	Institute for Biomedical Imaging Sciences	2008
Member	International Society for Pituitary Surgeons	2010
Fellow	American Academy of Neurological Surgery	2010
Member	Lewis Atterbury Stimson Society, Weill Cornell	2015
Member	The Society of Neurological Surgeons	2016

**F. HONORS AND AWARDS**

John Harvard Scholarship for Academic Achievement	1985-87
Hoopes Prize for Senior Thesis— Harvard College	1987

Magna Cum Laude – Harvard College	1987
Harvard Medical Student Research Fellowship	1991
Magna Cum Laude – Harvard Medical School	1993
Central Neuropsychiatric Association Resident Award, Honorable Mention	1996
Academy Award, The American Academy of Neurological Surgeons, Honorable Mention	1997
Junior Investigator Award, American Epilepsy Society	1997
Epilepsy Foundation Research/Clinical Training Fellowship	1999
Alexander Von Humboldt Fellowship	1999
William P. Van Wagenan Fellowship	2000
German Academic Exchange (DAAD) Award	2000
Academy Award, The American Academy of Neurological Surgeons, Honor. Mention	2000
Junior Investigator Award, Epilepsy Foundation of America	2001-02
Young Clinician Investigators Award, NREF, AANS	2001-02
The Goldenberg Lectureship, St. Francis Hospital, W. Hartford, CT	2002
NINDS K08 (NS 43799)	2002-07
The Dana Foundation Program in Clinical Imaging Award	2002-05
NINDS R21 (NS 42325)	2002-05
NINDS R01 (NS 94822)	2004-08
NIH Study Section (NCRR GCRC Site visit)	2005
NIH Study Section (NSD C)	2005-06
NINDS Research Supplement for Minorities – Preceptor	2005-06
Post-doctoral Research Fellowship, EFA – Preceptor	2006-07
MHHC Foundation Health Leadership Award	2006
Synthes Skull Base Award, CNS	2006
NINDS NSD-C Permanent Member	2006-2010
Univ. of Pitt. Neurosurgery Chairman Interview	2007
NIBIB Study Section 06-003 RFA	2007
NINDS, study section ZNS1 SRB-B	2008
Visiting Professor, UCLA	2008
George Ehni Lectureship, Visiting Professor, Baylor School of Medicine	2008
Faculty of 1000 Biology, PNAS paper	2008
New York Superdoctors	2008-present
Faculty of 1000 Medicine, Epilepsia Paper	2008
Visiting Professor, Stanford University	2008
NINDS, study section ZNS1 SRB-S	2008
Top Doctors, New York Metro Area, Castle Connolly	2008-present
America’s Top Surgeons, Castle Connelly	2008-present
Top Doctors, New York Magazine	2009-present
NINDS study section, ZNS-1 SRB-B 12	2009
Visiting Professor, UCSD	2009
The Global Directory of Who’s Who (Top Doctors)	2009-present
America’s Top Doctors for Cancer, Castle Connelly	2010-present
NIH Study Section ZRG1 ETTN-B	2010
President, Medical Strollers	2010
Visiting Professor, St. Catherine’s College, Oxford, England	2010
Visiting Professor, MGH, Harvard	2010
Visiting Professor, U. Rochester	2010

Wellcome Trust Grant	2010
CTSC GRANT UL1-RR024996	2010
American Academy of Neurological Surgery	2010
Visiting Professor, Johns Hopkins	2010
Visiting Professor, Bombay Neurological Association, India	2011
Visiting Lecturer, Dr. Balabhatic Nanavati Hospital, Mumbai, India	2011
Distinguished Skull Base Professor, University of Pennsylvania	2011
Visiting Professor, Dept of Neurobiology, Barrow Neurological Institute	2011
Visiting Professor, Dept of Neurosurgery, Jefferson Med Cntr	2011
Visiting Professor, Dept of Neurosurgery, University of Michigan	2011
Honored Guest, Mexican Neurosurgical Congress	2011
Visiting Professor, Dept. of Psychology, University of Sheffield, England	2011
NSADA K21 (Mentor)	2012
Kingswood-Oxford Stroud Science Symposium Lecture	2012
Visiting Professor, Dept. of Neurosurgery, North Shore-LIJ	2012
Honored Guest, 1 <sup>st</sup> International Forum on Skull base Trauma and Minimally Invasive Neurosurgery and 1 <sup>st</sup> Workshop on Endoscopic Skull base Surgery and 12th Workshop on Latest Neurosurgical Advancements, Neurosurgical Department of Changzheng Hospital, Shanghai, China	2012
Visiting Professor, Dept of Neurosurgery, Yale-New Haven Medical Center	2012
International Faculty, 5 <sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Vienna, Austria	2012
Honored Guest, Society for British Neurosurgeons, Aberdeen, Scotland	2012
Voices Against Brain Cancer Honoree	2012
NINDS R21 (NS 078644)	2013-15
Visiting Professor, Dept. of Neurosurgery, Lennox Hill	2013
Honored Guest, NUHS Dept. of Neurosurgery, Singapore	2013
Plenary Lecture, Rhinology Meeting, Sao Paulo, Brazil	2013
Plenary Lecture, International League against Epilepsy Meeting, Montreal	2013
Plenary Lecture, Mexican Neurosurgical Congress	2013
Honored Guest Lecturer, 1 <sup>st</sup> Dandy Division of Skull Base Surgery	2013
Visiting Professor, Dept. of Neurosurgery, Stanford University	2013
Gentle Giant Award, Pituitary Network Association	2013
Editorial Board, Journal of Neurosurgery	2013
Honored Guest Lecturer, Methodist Hospital	2013
Visiting Professor, Tel Aviv University, Israel	2014
Board of Trustees, The Dalton School	2014
Visiting Professor, University of Maryland	2014
Honored Guest Lecturer, Oncology Symposium, Cartagena, Columbia	2014
David and Ursel Barnes Endowed Professor of Minimally Invasive Neurosurgery	2014
International Faculty, 6 <sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Milan, Italy	2014
Invited Faculty, George Ojemann Symposium	2014
Invited Faculty, European Association of Neurosurgical Societies Meeting, Prague	2014
Keynote Speaker, 28 <sup>th</sup> Epilepsy Society of Australia Meeting	2014
Best Poster, 5 <sup>th</sup> London-Innsbruck Colloquium on Acute Seizures	2015
Keynote Speaker, 4 <sup>th</sup> Symposium on Endoscopic Transsphenoidal Surgery Kocaeli, Turkey	2015

Honored Guest Speaker, 2 <sup>nd</sup> International Congress of Neurosurgery, Ain Shams Cairo, Egypt	2016
Scientific Director, EndoChicago	2016
Advisory Board, Acta Neurochirurgica	2016
Honored Guest, International Congress of the Hypophysis, Mexico City	2016
Visiting Professor, INOVA, Fairfax, Virginia	2016
K 12 (NRDCP) Study Section	2016
Honored Guest, Saudi Arabia Neurosurgical Society	2017
Honored Guest Lecture, 20 Years of Neuroendoscopy, Naples, Italy	2017
Honored Guest, Spanish Skull Base Society, Valencia, Spain	2017
Honored Guest, XXVIII Columbian Neurosurgical Society	2018
Chair, Journal of Neurosurgery Editorial Board	2018
Honored Guest, 7 <sup>th</sup> Annual World Course in Advanced Brain Tumor Surgery	2018
Plenary Lecture, Congress of Neurosurgery	2018
Robert M. Ellsworth Lecturer, Department of Ophthalmology, Weill Cornell	2019
Honored Guest, 3 <sup>rd</sup> Annual Meeting of Korean Society of Endoscopic Neurosurgery	2019
Plenary Lecture, 16 <sup>th</sup> International Pituitary Congress	2019
Honored Guest, 8 <sup>th</sup> Annual World Course in Advanced Brain Tumor Surgery	2019
The 2019 Alfred Washington Adson Distinguished Lecturer, Mayo Clinic	2019
Honoree, The Brain Tumor Foundation	2019
Visiting Professor, Brigham and Women's Hospital Neurosurgery	2020
Honored Lecturer, Miami Global Brain Tumor Symposium	2020
Honored Lecturer, Moroccan Society of Neurosurgery	2020
Visiting Professor, CNS Virtual Visiting Professor	2020
Guest Emeritus, Jaipur Skull Base Live Surgery Course, India	2020
Honored Guest, 9 <sup>th</sup> Int'l Masters Course in Brain Tumor Surgery	2020
Honored Guest, Shifa Medical Center, Islamabad, Pakistan	2021
Visiting Professor, USC Dept. of Neurosurgery	2021
Honored Guest, X <sup>th</sup> Int'l Masters Course in Brain Tumor Surgery	2021
Honored Guest, National University of Singapore	2021
Visiting Professor, Barrow Neurological Institute	2021
Honored Lecturer, Miami Global Brain Tumor Symposium	2022
27 <sup>th</sup> Van Wagenen Lecturer, University of Rochester	2022
Visiting Professor, University of Pennsylvania	2022
27 <sup>th</sup> Annual Charles Fager Lecture, Lahey Clinic	2022
Honored Lecturer, Asian Congress of Neurosurgery	2022
Visiting Professor, Johns Hopkins	2023
Medical Board, Mission: Brain	2023
Mealey Lecture in Neuro-Oncology, Indiana University	2023
Honored Lecture, NEWS	2023

### **G. INSTITUTIONAL/HOSPITAL AFFILIATION**

Primary Hospital Affiliation: New York-Presbyterian Hospital  
Department: Neurological Surgery  
Other Hospital Affiliations: Overlook Hospital

New York Hospital Queens

**H. EMPLOYMENT STATUS**

Name of Employer: Weill Medical College of Cornell University

Employment status: Full-time salaried by Cornell

**I. CURRENT AND PAST INSTITUTIONAL RESPONSIBILITIES AND PERCENT EFFORT**

Teaching

*Courses*

Epilepsy/Cortical Circuitry Journal Club	Columbia U	Instructor	2000-02
Epilepsy Surgery	UMDNJ Med School	Instructor	2000-01
Neurosurgery Residents Curriculum	WMC	Instructor	2001- present
Epilepsy Surgery (MS III rotation)	WMC	Instructor	2001
Mind and Brain Course (MS II)	WMC	Instructor	2001
Greenberg Neurosurgery Conference	WMC	Instructor	2002
Weill-Cornell Seminar in Salzburg	Salzburg, Austria	Instructor	2004
The Neurological Examination (MS III)	WMC	Instructor	2005
Biomedical Engineering Course 411	Cornell U, Ithaca	Lecturer	2007-2015
CSV9: From Bench to Bedside	Cornell U, Ithaca	Lecturer	2008
Neurology Residents Curriculum	WMC	Instructor	2010-present
Medical Student AOC	WMC	Advisor	2017-present
Neurosurgery Journal Club	WMC	Instructor	2019-present

*CME Courses*

Neuroscience: Update for the New Millenium. A National Seminar - Faculty	2001
Caring for People with Epilepsy: Treatment Updates Special Concerns - Faculty	2002
Fourteenth Annual Long Island Regional Conference, EFLI - Faculty	2002
Helping people with epilepsy: combining compassion and expertise - Faculty	2002
New Avenues for Treating Brain Disease. Thinking Outside the Box - Faculty	2003
Brain Tumors: Advances in Diagnosis and Treatment - Faculty	2004
The Art of Endoscopic Skull Base Surgery – Course Director	2005-6
Current Topic in Neurology: Advances in Epilepsy - Faculty	2006
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2006
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2007
New Frontiers in Neurological Surgery – Faculty	2008
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2008
Brain and Spine in 2009 – Course Director	2009-10
Creative Management of Children with Epilepsy – Lecturer	2009
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2009



Brain and Spine – Course Director	2010-12
The Art and Science of Glioma Therapy - Course Director	2010
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2010
Advanced Endoscopic Sinus Surgery – Faculty	2010
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2011
New York Advanced Rhinology and Sinus Surgery – Faculty	2012
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2012
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2013
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2014
Advances in Brachytherapy, An International Symposium -Faculty	2015
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2015
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2016
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2017
Pituitary Tumors: Diagnostic and Treatment Dilemmas - Course Director	2017
Advanced Endoscopic Skull Base and Pituitary Surgery - Course Director	2018
Pituitary Disorders Across the Age Spectrum - Course Director	2018
Minimally Invasive Cranial Neurosurgery – Course Co-Director	2019
Pituitary Tumors: Medical, Surgical and Radiotherapy Treatments - Course Co-Director	2019
Minimally Invasive Cranial Neurosurgery – Course Co-Director	2020
Minimally Invasive Cranial Neurosurgery – Course Co-Director	2021
Pituitary Tumors: Medical, Surgical and Radiotherapy Treatments - Course Co-Director	2021
Endoscopic Transorbital Skull Base Surgery – Course Co-Director	2022
Endonasal, Supraorbital, Transorbital Skull Base Surgery – Course Director	2023
Pituitary Tumors: Medical, Surgical and Radiotherapy Treatments - Course Co-Director	2023

*Mentoring – Basic Science Research*

Vikram Kumar	Undergraduate	Columbia University	1996-97
Accepted to Harvard Medical School/MIT, Paul and David Soros Fellowship			
Residency Brigham & Women’s Hospital. Co-Founder Dimage			
Ilya Laufer	Undergraduate	Columbia University	1996-97
SUNY Stonybrook Medical School, WMC Neurosurgery residency, Associate Professor			
MSK neurosurgery			
Alex Labidou	Undergraduate	Pace University	2002-04
Neurosurgery Preceptorship, Denver Nuggets digital strategist			
Nina Bowens, B.A.	Medical Student	WMC of Cornell	2003
Coryell Prize in Surgery, Surgery residency, Vascular surgeon in CA			
Challon Perry, B.A.	Medical Student	WMC of Cornell	2003-07
Received NINDS Research Supplement for Minorities Grant, Surgery Intern			
Danny Wong, B.S.	Technician	WMC of Cornell	2002-04
Ashesh Mehta, M.D., Ph.D.	Resident/Post-doc	WMC of Cornell	2002-03
Director of Epilepsy Surgery, North Shore/LIJ – Harvey Cushing Institute			
Minah Suh Ph.D.	Post-doctoral Fellow	WMC of Cornell	2001-04
	Assistant Professor	WMC of Cornell	2004-08
Received \$160,000 research grant from Neuropace, Received NINDS R21, currently			
Professor and Chair of Biomedical Engineering, Sungkyunkwan University, Suwan, South Korea			
Sonya Bahar Ph.D.	Post-doctoral Fellow	WMC of Cornell	2001-04

	Currently Professor of Physics and Director, Center for Neurodynamics, St. Louis University	
Saadat Sharif, MD	Post-Doctoral Fellow WMC of Cornell Albert Einstein Surgery Residency, Surgeon Montefiore Hospital, Bronx, NY	2004-05
Hongtao Ma, PhD	Post-Doctoral Fellow WMC of Cornell Associate Professor of Neurosurgery, WMC of Cornell	2004-present
Mingrui Zhao, PhD	Post-Doctoral Fellow WMC of Cornell Associate Professor of Neurosurgery, WMC of Cornell	2004-present
Andrew Geneslaw, B.A.	Research Associate WMC of Cornell Tufts medical School, Pediatrics residency Columbia, Asst Prof Pediatrics	2006-2008
Alon Mass	Research Associate WMC of Cornell Cornell Undergraduate on Urban Semester	2007
Daniel De la Cruz, PhD	Post-Doctoral Fellow WMC of Cornell	2007-2009
Nathan Cornelius, BA	Research Associate WMC of Cornell	2008
Manuel Mercier, PhD	Post-doctoral Fellow WMC of Cornell	2009-present
Guido Lancman, MD	Research Associate, WMC of Cornell Brown Medical School, Hematology Residency, MT. Sinai	2010-2011
Kunal Patel	Weill Cornell Medical Student/AANS Fellowship Accepted to UCLA Neurosurgery residency program	2012
Sotiros Keros, MD	NSADA K12 Awardee WMC of Cornell Assistant Professor Pediatric Neurology, WMC of Cornell	2012-2015
Sam Harris PhD	Post-Doctoral Fellow, WMC of Cornell Senior Staff Scientist, University College London	2012-2013
Andy Daniel BA	Research Associate, WMC of Cornell PhD in Neuroscience, Washington University, St. Louis	2014-2017
Eliza Baird-Daniel BA	Research Associate, WMC of Cornell Medical Student, University of Colorado Neurosurgery Residency, University of Washington, Seattle	2015-2017 2017-2021 2021-
Poornima Gadamsetty PhD	Research Associate, WMC of Cornell Data Quality Scientist, Interpreter	2016-2018
Iyan Younus MD	Research Associate, WMC of Cornell	2017
Seth Lieberman PhD	PhD Candidate, Cornell University	2018
Whitney Parker, MD, PhD	Neurosurgery Resident, F32 grant	2018
Jing Li PhD	Post-Doctoral Fellow, Jilin University China	2018
Fan Yang PhD	Post-Doctoral Fellow, Jilin University China	2018
James Nimeyer PhD	Post-Doctoral Fellow	2019
Phil Poppas	Undergraduate, Cornell University	2019
Sydney Kaye	Undergraduate, U Penn	2019
Peijuan Luo PhD	Post-Doctoral Fellow, Jilin University China	2019
Fengrui Zhan BA	Research Technician	2021
Josh Estin	Research Fellow	2022
Carmen Pons MD	Research Fellow Neurosurgery Residency, U Chicago	2022 2023

*Mentoring – Clinical Research Surgical Technique*

Neurosurgery Residents

Joseph Yazdi, Catherine Mazzola, Richard Schlenk, Raj Raab, Hooman Asmi, Martin Zonanshayn, Roger Hartl, Miltos Sugiultzoglou, David Sandberg, Yu-Hung Kuo, Jeremy Wang,

David Wells-Roth, Ashesh Mehta, Jeffrey Greenfield, Kyle Chapple, Dmitrius Plakantonakis, Justin Fraser, Ilya Laufer, Jared Knopfman, Lewis Leng, William Cobb, Michelle Smith, Caitlin Hoffman, Christoph Hofstetter, Neal Luther, Michael Virk, Joshua Marcus, Heather McCrea, Peter Morgenstern, Babacar Cisse, Hilary Tomaszewicz, Brenton Pennicooke, Benjamin Rapaport, Thomas Link, Justin Schwartz, Ibrahim Hussein, Whitney Parker, Ben Hartley, Lee Adam Wheeler, Evan Bander, Joseph Carnevale, Alex Ramos, Mari-Cruz Rivera, Jake, Goldenberg, Andrew Garton, Umberto Tosi, Alexandra Larsen, Graham Winston, Nalini Tati, Natasha Kharas, John Chae

ENT Endoscopic Skull Base Fellowship 2004-present  
Abtin Tabaee MD, Seth Brown MD, Ameet Singh MD, Madeleine Schaberg MD, Gurston Nyquist MD, Edward McCoul MD, Jeffrey Bedrosian MD, Roheen Raithatha MD, Angela Donaldson MD, Muhamad Amine MD, Gustavo Almodovar-Padillo MD, Vib Sekhasaria MD, Christian Soneru MD, Alex Riley MD, Amrita Roy MD

Medical Students-Research Mentorship 2002-present  
Kunal Patel, Stephanie Lazow, Matei Banu, Collin Tebo, Malte Ottenhausen, Evan Bander, Menachem Yandorf, Samuel Jones, Vishal Prabhu, Raymond Xu, Shoshana Taube, Kavelin Rumalla, Iyan Younus, Christopher Babu, Omri Mayan, Miguel Lavieri

Biomedical Engineering Student Summer Research 2008-present  
Oversee visiting biomedical engineering students from Cornell University and mentor a research project as part of NIBIB T35EB006732.

High School Summer Internship Program 2005-present  
Oversee 3-5 high school students for the summer as interns

Endoscopic Skull Base Surgery Fellowship and Skull Base Laboratory 2008-present

International Fellows (3 months observation and cadaver dissection)  
Jonathan Roth MD (Israel), Yaron Moshel MD (NYU), Manish Kasliwal MD (India), Gregor Markov (Germany), Luis Diaz MD (Brazil), Victor Garcia MD (Mexico), Sandeep Bhango MD (Detroit), Dejan Jakimovski MD (Macedonia), Moshe Attia MD (Israel), Allison Rathman MD (St. Barnabas, NJ), Fatema Bayad MD (Egypt), Kamel Mahmoud (Scotland), Danilo Silva MD (Brazil), Lino Mascarenhas MD (Portugal), Mara Teresa Campos (Mexico), Al Amin Salek MD (Singapore/Bangladesh), Yue Ma MD (China), Yughun Altibaev (Uzbekistan), Asadullaev Lilugbek (Uzbekistan), Reza Ahmady Daha (Iran), Osaama Khan MD (Toronto), Jamie Van Gompel (Mayo Clinic), Dexiang Zhou (China), Maria Alvarez-Diaz (Columbia), Tony Goldschlager (Australia), Aikatarina Patrona (Greece/Germany), German Rene Alvarez Berastegui (Columbia), Romero Flavio (Brazil), Yuan Hong (China), Tomasz Dzedzic (Poland), Sertac Kirnaz (Turkey), Emanuele La Corte (Italy), Mariate Garcia Campo, (Spain), Jangath Lal Gangadharan (India), Alicia Del Carmen Becerra Romero (Brazil), Manish Pai (India), Prajapait Vishal (India), Hazem Negm (Egypt), Rafid Al-Mahfoudh (United Kingdom), Vishal Prabhu (Rochester), Jose Martinez-Manrique (Mexico), Richard Murray (South Africa), Dr. S.S. Dhandapani (India), Salomon Cohen (Mexico), Ahmed Mudassir (Pakistan), Guangwei Sun (China), Jian Zhihong (China), Qing Wang (China), Sarang Rote (India), Walid Ibn Essayed (France), Peter Wilson (Australia), Smeer Salam (Pakistan), Bao Xinje (China), Sathwik Shetty (India), Jaoa Paolo Cavalcante de Almeida (Brazil), Armando Saul Ruiz Trevino (Mexico).

Abouhashem Safwat (Saudi Arabia), Yu-Ning Chen (Taiwan), Buqing Liang (China), Claudio Guerci (Italy), Shilei Ni (China), Nair Prakash (Pakistan), Dharmendra Prasad (India), Jerome Boatay (Ghana), Elizabeth Ognondo (Mexico), Maureen Diwan (St. Barnabas), Andrew Alalade (London), Saikiran Murthy (St. Barnabas), Malte Ottenhausen (Germany), Edgar Ordonez (Columbia), Asif Shafiq (St. Barnabas), Sudheesh Ramachandran (Bangladesh), Maj Roberta (Italy), Mohamed Arnout (Egypt), Lukasz Przepiorka (Poland), Vanessa Hernandez (Spain), Agustin Montivero (Argentina), Ahmespahic Adi Ahmetspahic (Argentina), Zhigang Mao (China), Luis Carlos Requena (Venezuela), Alberto Torres Diaz (Barcelona), Mina Mouneer Gerges (Egypt), Abad Cheri El Asri (Egypt), Matthew Cummock (St. Barnabas), Javier Saavedra (Columbia), Rafeed Hashim Al Drous (Saudi Arabia), Bhushan Kathuria (India), Jennifer A. Kosty (Mayfield Neurosurgery Clinic), Rodrigo Becco de Souza (Brazil), Bose Ratnadip (India), Dishod Muhammadvalievich (Uzbekistan), Antomy Thomas (South Africa), Antonio Meola (Italy), Alberto Torres Diaz (Spain), Monica Lem (Mexico), Reginald Fong (Geisinger), Rodrigo Becco (Brazil), Christopher Ramirez (Mexico), Kashif Ahmed (India) Wahaj Ahmed (India), Marcos Sangrador (Mexico City), Shejoy Joshua (India), Ernest Bobeff (Poland), Sean Trmpop (South Africa), Davide Longo (Italy), Vincent Nga (Singapore), Xu Xinni (Singapore), Abel Ferrer (Barcelona), Hafiza Fatima (Pakistan), Stavros Polyzoidis (Greece), Cezary Groxchowski (Poland), Gulce Gul (Turkey), Victor Ramses Chavez-Herrera (Mexico), Ravneet Verma (India), Mattia Testa (Italy), Jonathan Tangrivimol (Thailand)

Operative Fellows (6 months in operating room with cadaver dissection)

Graeme Woodworth MD (Hopkins)	2014
Tong Yang MD (University of Washington)	2014
Oszkar Szentermia MD (U Colorado)	2015
Shaan Raaza (MD Anderson)	2015
Harman Singh (Stanford University)	2016
Bulent Sacit (Yale University)	2016
Gunjan Goal (UCSD)	2017
Jonathan Forbes (Vanderbilt)	2017
Peter Morgenstern (Cornell)	2018
Leopold Arko (Temple)	2018
Rafale Uribe-Cardenas (Cornell)	2018
Saniya Godil (Vanderbilt)	2019
Brett Youngerman (Columbia)	2019
Benjamin Rapoport (Cornell)	2020
Alex Michael (Southern Illinois University)	2020
Fraser Henderson (Medical University of South Carolina)	2021
Dimitrius Mathios (Johns Hopkins)	2022
Evan Bander (Cornell)	2023
Rupen Desai (Wash U)	2023
Nader Delvary (NYU)	2024

Senior Mentor            Leadership in Academic Mentorship Program, WMC of Cornell U    2014

Clinical Care

Chief, Division of Neurosurgery	Jersey City Med Ctr, Jersey City, NJ	2000-01
Director, Epilepsy Surgery	UMDNJ-NJ Med School, Newark, NJ	2000-01

Chief, Division of Neurosurgery	St. Barnabas Hospital, Bronx, NY	2001-2002
Director of Epilepsy Surgery	WMC of Cornell U	2001-current
Director, Center for Minimally Invasive Skull Base and Pituitary Surgery	WMC of Cornell U	2005-current
Director, Epilepsy Surgery	Overlook Hospital	2005-current
Co-Director, Surgical Oncology	WMC of Cornell U	2010-current
Member, Cornell Cancer Center	WMC of Cornell U	2011-2018

Clinical expertise in brain tumors, epilepsy surgery, endoscopic pituitary surgery, minimally invasive skull base surgery, neuro-oncology, intraoperative MRI, stereotactic radiosurgery and awake brain mapping.

### Administrative duties

Interdisciplinary Trauma Committee	Jersey City Medical Center, NJ	2000-01
Director, Epilepsy Surgery	UMDNJ-NJ Med School, Newark, NJ	2000-01
Director, Epilepsy Research	UMDNJ-NJ Med School, Newark, NJ	2000-01
Director, Brain Tumor and Epilepsy Research Fund	WMC of Cornell U, NYC	2001-present
Director, Epilepsy Surgery	WMC of Cornell U, NYC	2001-present
Director, Epilepsy Research	WMC of Cornell U, NYC	2001-present
Epilepsy Surgery Conference	WMC of Cornell U, NYC	2001-present
Tumor Board	WMC of Cornell U, NYC	2001-present
Quality Assurance Committee	WMC of Cornell U, NYC	2002-2008
Oncology Operations Council	WMC of Cornell U, NYC	2002-2008
Neuroscience Service Line	WMC of Cornell U, NYC	2002-05
Director, CME Committee	WMC of Cornell U, NYC	2002-05
Dept of Neurological Surgery		
Cancer Biology Subcommittee	WMC of Cornell U, NYC	2003
Westchester Campus Initiative		
Malpractice Coverage Committee	NYPH, NYC	2005-2009
Physicians Organization		
Post Graduate Advisory Committee	WMC of Cornell U, NYC	2006-present
Director of Midlevel Operations	WMC of Cornell U, NYC	2007-09
CME Committee	WMC of Cornell U, NYC	2007-present
Initiative for Neurosciences Cmtee	WMC of Cornell U, NYC	2008-present
Faculty Recruitment Committee	WMC of Cornell U, NYC	2008-present
Search Committee, Chief of Endocrinology	WMC of Cornell U, NYC	2008 -2012
Search Committee for Director, The Appel Institute for Alzheimer's Research	WMC of Cornell U, NYC	2008-2013
Director, Endoscopic Skull Base Surgery Fellowship	WMC of Cornell U, NYC	2009-present
PO Managed Care Committee	WMC of Cornell U, NYC	2010-2015
Chair, Search Committee, Neuroendocrinologist	WMC of Cornell U, NYC	2011-2014
Member, Weill Cornell Cancer Ctr	WMC of Cornell U, NYC	2011-2017

CTSC Grant Reviewer	WMC of Cornell U, NYC	2012-present
Neuro-Oncology DMT/PRMC	WMC of Cornell U, NYC	2018-present
Vice-Chairman of Clinical Research	WMC of Cornell U, NYC	2019-present
Department of Neurosurgery		
COVID OR Safety Committee	WMC of Cornell U, NYC	2020
COVID Neurosurg Leadership Cmte	WMC of Cornell U, NYC	2020
COVID Re-emergence Committee	WMC of Cornell U, NYC	2020

## Research

### *Basic Science*

Graduate Research Fellow, Department of Neurological Surgery University of Washington, Seattle, WA “Intraoperative extracellular microelectrode recording from human temporal neocortex during cognitive behaviors” P.I. – George A. Ojemann, M.D. “Reading errors during intracarotid injection of sodium amytal” P.I. – Carl B. Dodrill, Ph.D.	1992-93
Post-Doctoral Fellow, Departments of Neurology and Neurosurgery New York University, NYC “Language localization with subdural grid stimulation mapping” P.I. – Kenneth Perrine, Ph.D.	1996-97
Post-Doctoral Fellow, Department of Biology Columbia University, NYC “Calcium imaging and electrophysiology in rat neocortical slice and hemispheric preparations” P.I. – Rafael Yuste, M.D., Ph.D.	1996-97
Post-Doctoral Fellow, Department of Neurobiology Max-Planck Institute, Munich, Germany “Intrinsic Signal Imaging of Neocortical Epilepsy” P.I. – Tobias Bonhoeffer, Ph.D.	1999
Director of Epilepsy Research, Department of Neurological Surgery WMC of Cornell U “Intrinsic signal imaging of neocortical epilepsy in rat and human” P.I. – Theodore H. Schwartz, M.D. Lab consists of 2 Assistant Professors and a technician. Neurosurgery residents and graduate students rotate through lab. Direct weekly lab meetings and journal club meetings.	2001-present
Multiple active ongoing collaborations with other investigators including Chris Schaffer PhD, Assistant Professor of Biomedical Engineering, Cornell University Two-photon transections for stopping seizures John Foxe, PhD, Professor Neurophysiology, Nathan Kline Institute Multisensory integration in human cortex	

Stewart Anderson MD, Assistant Professor of Psychiatry, WMC of Cornell University  
 Interneuron transplantation for epilepsy

John Boockvar MD, Associate Professor of Neurosurgery, WMC Cornell University  
 Harvesting and differentiation of human stem cells

Steven Goldman MD, Professor of Neurology, University of Rochester  
 Differentiation of human and glioma stem cells

Ionnis Kymissis PhD, Department of Electrical Engineering, Columbia University  
 Implantable optical grid

Rafael Yuste, PhD Department of Biology, Columbia University, Howard Hughes Institute  
 Optical uncaging and manipulation of epileptic circuits

Jason Berwick PhD, Department of Psychology, University of Sheffield, Sheffield, UK  
 Multimodal imaging of somatosensory processing in epileptic rat cortex

Cathy Schevon MD – Department of Neurology, Columbia College of Physicians and Surgeons  
 Multicontact extracellular recordings of seizure propagation

Alex Proekt MD – Department of Anesthesiology, Weill Cornell Medical College  
 High density cortical recordings during arousal and depths of anesthesia in humans

Marla Hamberger PhD, Department of Neuropsychology, Columbia University  
 Hippocampal stimulation mapping

Emre Aksay PhD, Department of Biology, Weill Cornell Medical College  
 Single cell calcium imaging in a zebrafish model of epilepsy

Li Gan PhD, Director, Appel Alzheimers Research Institute, Weill Cornell Medical College  
 Hyperexcitability of ApoE mice model of Alzheimer’s Disease

Natalia De Marco Garcia PhD, Center for Neurogenetics, Weill Cornell Medicine  
 Gabrb3 is required for the functional integration of pyramidal neuron subtypes in the somatosensory cortex

*Clinical Trials*

Cognitive and Sensorimotor Event-Related Potentials Recorded  
 With Subdural and Depth Electrodes. 2003-present  
 WMC of Cornell U  
 Site P.I. – Theodore H. Schwartz, M.D  
 Cognitive evoked potentials from patients with implanted subdural electrode arrays

Precise Trial, Neopharm 2004-06  
 WMC of Cornell U  
 Site P.I. – Theodore H. Schwartz, M.D  
 Randomized multicenter Phase II/III trial of convection enhanced delivery of IL-13/pseudomonas  
 exotoxin versus gliadel for recurrent glioblastoma multiforme

Neuropace Trial 2005-06  
 WMC of Cornell  
 Co- P.I. – Theodore H. Schwartz, M.D  
 Multicenter Phase I trial of a surgically implanted responsive neurostimulation device for epilepsy

Outcome of Epilepsy Surgery at WCMC 2005-present

WMC of Cornell  
Co- P.I. – Theodore H. Schwartz, M.D  
Case controlled series of grid, depth implants and resections

Outcome of Endoscopic Skull Base Surgery at WCMC 2005-present  
WMC of Cornell  
Co- P.I. – Theodore H. Schwartz, M.D  
Case controlled series of endoscopic skull base surgical cases

IVAX Trial 2005-06  
WMC of Cornell U  
Site P.I. – Theodore H. Schwartz, M.D  
Multicenter Phase II trial of convection enhanced delivery of TP-38 for recurrent glioblastoma multiforme

Gliasite Trial 2007-08  
WMC of Cornell U  
Site P.I. – Theodore H. Schwartz, M.D  
A phase I/II trial of maximal resection, local radiation therapy with concomitant temozolomide, followed by external radiation therapy with concomitant temozolomide for the treatment of newly diagnosed glioblastoma multiforme

Novocure Study 2007-2011  
WMC of Cornell U  
Site Co-P.I. Theodore H. Schwartz, M.D.  
A prospective multicenter trial of NovoTTF-100A compared to best standard of care in patient with progressive or recurrent GBM

Celldex Trial 2008-2010  
WMC of Cornell U  
Site P.I. Theodore H. Schwartz, M.D.  
A phase II/III randomized study of CDX-110 with radiation and temozolamide for patients with newly diagnosed glioblastoma multiforme

ETV for NPH 2008-2010  
WMC of Cornell U  
P.I. Theodore H. Schwartz, M.D.  
Outcome of third ventriculostomy for normal pressure hydrocephalus

Duraseal in Endoscopic Transsphenoidal Surgery Safety Trial 2010-2011  
WMC of Cornell U  
P.I. Theodore H. Schwartz, M.D.  
Safety of Duraseal in Transsphenoidal Surgery

Intracavitary Brachytherapy for metastases with Cs-131 seeds 2010-present  
WMC of Cornell U  
Co-P.I. Gabriella Wernicke, M.D., Theodore H. Schwartz, M.D.



Endoscopic Surgery with 5-ALA to Assess Extent of Resection WMC of Cornell U P.I. Theodore H. Schwartz, M.D.	2011-present
Injection of Indigocarmine to Increase Extent of Resection of Low Grade Gliomas WMC of Cornell U P.I. Theodore H. Schwartz, M.D.	2011-present
A Pilot Study to Determine the Variance of [ <sup>18</sup> F]Fluorocholine PET Signals Before and after the Early Phase of Chemoradiotherapy for Gliomas and its Clinical Significance in Predicting Tumor Control WMC of Cornell U Co-P.I. Theodore H. Schwartz, M.D.	2013-present
North American Skull Base Society Multicenter Patient Registry Multicenter centralized database of skull base tumor surgery Co-P.I. Theodore H. Schwartz, M.D.	2013-present
Seizure localization in humans: the effect of inhibitory surround on the EEG Multicenter trial of Utah array implant in epilepsy patients P.I.- Cathy Schevon M.D, Site coordinator/Site P.I. – Theodore H. Schwartz M.D.	2013-2018
Hippocampal stimulation mapping Multicenter Trial P.I – Marla Hamburger, PhD, Site coordinator/Site P.I. – Theodore H. Schwartz, M.D.	2014-2018
5-ALA endoscopic imaging of benign skull base tumors P.I.-Theodore H. Schwartz, M.D.	2019-2020
Negative pressure antechamber for reducing aerosolization of viral particles during endoscopic skull base surgery P.I.-Theodore H. Schwartz, M.D.	2020-2022

Current percent effort	%	WMC Students	WMC Researchers
Teaching	5	X	X
Clinical Care	75	X	
Administration	5	X	X
Research	15	X	X
<b>TOTAL</b>	<b>100%</b>		

**J. RESEARCH SUPPORT (GRANTS) (past and present)**

<b>Location</b>	<b>Direct Support</b>	<b>Year</b>	<b>PI</b>
U. of Washington	\$5,000	1991	P.I. Theodore Schwartz, M.D.
	Graduate Research Fellow – analyzed human intraoperative extracellular microelectrode data - 100%		
Harvard University	\$12,000	1991	P.I. Theodore Schwartz, M.D.
	Graduate Research Fellow – analyzed human intraoperative extracellular microelectrode data - 100%		
Columbia-Presbyterian	\$1,500	1997	P.I. Theodore Schwartz, M.D.
	Resident Research Grant – In vitro calcium imaging of human neocortex - 20%		
Epilepsy Foundation	\$40,000	1999	P.I. Theodore Schwartz, M.D.
	Research/Clinical Training Fellowship – Epilepsy surgery fellowship and In vivo optical imaging of neocortical epilepsy - 100%		
German Government	20,000 DM	1999	P.I. Theodore Schwartz, M.D.
	Von Humboldt Fellow - In vivo optical imaging of neocortical epilepsy in ferret visual cortex - 50%		
AANS	\$25,000	1999	P.I. Theodore Schwartz, M.D.
	Van Wagenen Fellow- In vivo optical imaging of neocortical epilepsy in ferret visual cortex - 50%		
NINDS RO1 NS40726	\$1,300,000	2000	P.I. Rafael Yuste, M.D., Ph.D.
	Co-Investigator, In vitro calcium imaging of rat neocortical epilepsy - 10%		
Epilepsy Foundation	\$40,000	2001	P.I. Theodore Schwartz, M.D.
	Junior Investigator Award In vivo optical imaging of neocortical epilepsy in acute and chronic rat models of neocortical epilepsy - 25%		
CURE Foundation	\$48,000	2001	P.I. Theodore Schwartz, M.D.
	Investigator- In vivo optical imaging of human partial onset epilepsy - 25%		
AANS/NREF	\$40,000	2001	P.I. Theodore Schwartz, M.D.
	Clinician/Investigator Award- In vivo optical imaging of rat neocortical epilepsy - 25%		
NINDS K08 NS43799	\$657,450.	2002-07	P.I. Theodore Schwartz, M.D.
	Investigator- In vivo optical imaging of neocortical epilepsy in acute and chronic rat models of neocortical epilepsy - 50%		
The Dana Foundation	\$100,000	2002-05	P.I. Theodore Schwartz, M.D.
	Investigator - In vivo optical imaging of human partial onset epilepsy - 10%		
NINDS R21 (NS 42325)	\$762,630	2002-05	P.I. Theodore Schwartz, M.D.
	Investigator - Two-photon subpial transections: a novel treatment of neocortical epilepsy - 10%		
Merck	\$10,640	2003-04	P.I. Theodore Schwartz, M.D.
	Investigator – COX-2 inhibitors and post-craniotomy pain - 10%		
NINDS R01 (NS 94822)	\$1,175,000	2004-2010	P.I. Theodore Schwartz, M.D.
	Investigator – Optical imaging of epilepsy in rats and humans – 25%		
NEI 2-R01 (EY09314)	\$1,380,000	2004-2008	P.I. Jonathan Victor, M.D., Ph.D.
	Consultant - Optical imaging of macaque visual cortex		
Epilepsy Foundation	\$35,000	2005-2007	P.I. Tracy Butler, M.D.
	Co-investigator, intracranial amygdala measurements of mood		
Epilepsy Foundation	\$40,000	2006-2007	P.I. Hongtao Ma, Ph.D.
	Mentor – Post-doctoral research fellowship		
NINDS	\$35,000	2006-2007	P.I. Theodore H. Schwartz, M.D.
	Research Supplement for Minorities to Challon Perry, B.A.		

Neuropace	\$160,000	2006-2008	P.I. Minah Suh, PhD
Co-Investigator, Imaging of bipolar cortical stimulation			
Ithaca-NYC Seed Grant	\$50,000	2006-2007	Co-P.I. Theodore H. Schwartz, M.D.
Femtosecond laser ablations to control neocortical epilepsy			
NINDS R21 NS054866	\$206,220	2007-2009	P.I. Minah Suh, PhD
Consultant, Treating Cortical Epilepsy with Interneuron Transplants			
ASALMS Grant Award	\$134,000	2007-2009	Co-P.I. Theodore H. Schwartz, M.D.
Femtosecond laser ablations to control neocortical epilepsy -5%			
NIBIB T35EB006732		2006-2014	P.I. Yi Wang, PhD
Co-investigator, Clinical immersion for biomedical engineering PhD students – 0%			
NIH 1K23NS057579	\$815,715	2008-2013	P.I.-Tracy Butler, M.D.
Collaborator, Use of PET and fMRI to investigate role of inflammation in epilepsy – 0%			
Tri- SCI Stem Cell Grant	\$1,000,000	2008-2011	Co-P.I. Theodore H. Schwartz, M.D.
Developing a cell-based therapy for intractable seizures of the cerebral cortex – 5%			
1S10RR029663-01	\$670,486	2009-2010	P.I. Frederick Maxfield, Ph.D.
A multiphoton microscope for translational and basic biomedical research			
Wellcome Trust	\$688,000	2011-2013	Co-P.I Theodore H. Schwartz MD
Understanding epilepsy in the active brain – 5%			
CTSC ULI-RR0249	\$80,000	2011-2012	P.I. Gabriella Wernicke MD
Mentor for PI on Intracavitary brachytherapy compared with post-resection SRS for brain metastases			
K12 NS066274	\$1,249,200	2012-2015	P.I. Barry Kosofsky, MD
Co-mentor to Sotiros Keros for cell-based therapy for epilepsy			
CURE Foundation	\$100,000	2012-2012	P.I. Hongtao Ma PhD
Co-Investigator, Simultaneous ECoG and optical recording of seizures in freely-moving rats			
CTSC Pilot Award	\$90,000	2011-2013	P.I. Mingrui Zhao, PhD
Co-mentor, A novel femtosecond laser surgical therapy for neocortical epilepsy			
Ithaca-NYC Seed Grant	\$50,000	2012-2013	P.I. Mingrui Zhao, PhD
Mentor, Focal seizure localization by mapping excitatory and inhibitory neural activity			
AANS Medical Student Fellowship		2012	P.I. Kunal Patel
Mentor, VNS for tumor associated epilepsy			
NINDS R21 NS078644	\$451,000	2013-2015	Co-P.I. Theodore H. Schwartz MD
Femtosecond laser-produced subsurface cuts to halt focal epileptic seizures			
NINDS R01NS084142		2013-2018	P. I. Catherine Schevon MD
Consultant, Multicenter trial of Utah array implant in epilepsy patients			
NSF CBET-1264928	\$299,971	2013-2016	P.I. John Kymissis PhD
Co-Investigator, Collaborative research in biophotonics: Implantable sensor			
AES Seed Grant	\$15,000	2014-2015	P.I. Theodore H. Schwartz MD
Mapping Ictal Discharges Using Photoacoustic Tomography			
Weill Cornell Seed Grant	\$100,000	2014-2015	P.I. Theodore H. Schwartz MD
Single cell calcium imaging of zebrafish model of epileptogenesis			
Epilepsy Research UK	£150,000	2015-2016	P.I. Jason Berwick PhD
Co-Investigator, How activation of sensory regions can promote propagation of adjacent focal neocortical seizures			
The Daedalus Fund	\$100,000	2015-2016	P.I. Theodore H. Schwartz MD
Femtosecond laser-produced subsurface cuts to halt focal epileptic seizures			
NREF	\$50,000	2017	P.I. Theodore H. Schwartz MD

	Mentor, Medical Student Research Fellow, In vivo mouse imaging of epilepsy	
F32 NS108596	\$63,000	2018 P.I. Theodore H. Schwartz MD
	Mentor, Neurosurgery Resident, The Role of Novel NMDA Receptor Variants in Human Brain Development and Epilepsy	
FIENS	\$7,000	2021 P.I. Theodore H. Schwartz MD
	Mentor, Bassett FIENS Global Neurosurgery Fellowship	

## **Fundraising**

1. Brain Tumor and Epilepsy Research and Clinical Development Fund 2003-present  
 Raised donations for laboratory and clinical research from individuals and patients  
 >\$5,000,000 to date
2. Neurosurgery Research Fellowship 2007-2009  
 Annual donation for epilepsy research to support post-doctoral fellow and supplies  
 \$125,000 per year
3. Ithaca-Weill Collaborative Research Fellow 2007-2009  
 Annual donation to support research fellow in collaborative epilepsy research between  
 Cornell University Department of Biomedical Engineering and Weill Cornell Medical  
 College Department of Neurosurgery  
 \$35,000 per year
4. Raised \$3,000,000 for first Endowed Chair in Neurosurgery 2014  
 Weill Cornell Medical College, The David and Ursel Barnes Professorship in Minimally  
 Invasive Neurosurgery

## **Media Experience**

### Television

NBC News - Live at 5 "fMRI in operating room"	2004
The Today Show "Do cell phones cause Brain Tumors"	2005
CBS Morning News "Arteriovenous Malformations"	2006
Business Week - Money Talks "VNS and Depression"	2006
MSNBC - "Journey to the Center of the Brain"	2007
Larry King "Do cell phones cause Brain Tumors"	2008
CBS News - "3D endoscopic brain surgery"	2008
CBS News - "Vaccine for Malignant Brain Tumors"	2009
Fox News - "Cell phones and Brain Tumors"	2011
ABC News - "NYP Med"	2012
Discovery Channel 3D Network	2012
The Today Show - "Hemicraniectomy"	2012
Gadget Flow - "tDCS"	2019
This Is Your Brain - "Minimally Invasive Brain Surgery"	2019
The Neurosurgery Podcast - "Covid in NYC"	2020
The Doctor Podcast	2023

## **K. EXTRAMURAL PROFESSIONAL RESPONSIBILITIES**

### Editorial

Ad-Hoc Manuscript Reviewer		2001-present
Epilepsia, Neurosurgery, Surgical Neurology, Neurology, Brain Research, Ann. Neurology, Journal of Neuroscience, Trends in Neuroscience, Clinical Neurology and Neuroscience, Neurobiology of Disease, NeuroReport, NeuroImage, Otolaryngology and Head and Neck Surgery, Lancet Neurology, Skull Base, European Journal of Neurology, Journal of Neuro-Oncology, Applied Optics, Journal of Neuroscience Methods, World Neurosurgery. Journal of Neurosurgery, European Journal of Neuroscience		
Editorial Board	Epilepsy Currents	2004-2011
Editorial Board	Epilepsy Research and Treatment	2009-2012
Editorial Board	World Neurosurgery	2010-2016
Editorial Board	Frontiers in Neuro-Oncology	2012-present
Editorial Board	Frontiers in Endocrinology (Pituitary)	2014-present
Editorial Board	Journal of Neurosurgery	2013-2018
Chief Section Editor	Journal of Neurosurgery	2019
Editorial Board	Acta Neurochirurgica	2016-present

### Grant Review

Ad-Hoc Grant Reviewer		2001-present
CURE Foundation, Human Frontiers Science Program, Elsberg Grant, Burroughs Welcome Trust, Congress of Neurosurgeons Research Fellowship, NINDS, Epilepsy Research UK, CTSC-WCMC, Israel Science Foundation		
NIH study section	NCRC, GCRC Reviewer	2005
NIH Study section	NSD C Tuberous Sclerosis Workgroup	2005
NIH Study section	NINDS NSD-C, Permanent member	2006-2011
NIH Study section	NIBIB 06-003 RFA	2007
NIH study section	NINDS ZNS1 SRB-B	2008
NIH study section	ZNS1 SRB-B 12	2009
NIH study section	ZNS1 SRB-B 17	2009
NIH study section	ZNS1 SRB-S 20	2009
NIH study section	ZRG1 ETTN-B 90	2010
NIH study section	NRCDP	2016

### Global Health

2015-present

I am a member and recurring volunteer with Mission:Brain (Bridging Resources and Advancing International Neurosurgery), a nonprofit organization whose goal is to provide neurosurgical expertise and resources to patients, caregivers, and healthcare providers in underserved areas throughout the world. I have gone on three missions in Guadelajara, Mexico performing brain tumor surgery and lecturing to the students. In 2022 I formally joined the medical board.

### Other Extramural Responsibilities

Van Wagenen Fellowship Cmtee	AANS	1999-present
Scientific Program Committee	AES	2001-02
Investigator Workshop Committee	AES	2001-03

Instructor	AANS Board Review Course	2002-04
Physician's Advisory Board	Epilepsy Foundation of New York	2003-07
Faculty Lecturer	New York Roentgen Society Meeting	2004
Fellowship Committee	CNS	2004-05
Course Director	The Art of Endoscopic Skull Base Surgery	2005
Course Director	Advanced Endoscopic Skull Base Surgery	2005
Scientific Advisory Board	Citizen's United for Research in Epilepsy	2005-08
Bylaws Committee	CNS	2006-08
Instructor	Endoscopic Skull Base Course, NASBS	2006
Publication Committee	AANS	2006-09
Instructor	Endoscopic Skull Base Surgery, Naples	2006
Scientific Advisory Board	Confluent Surgical, Inc	2007-09
Director	Endoscopic Skull Base Course, NASBS	2007
Scientific Committee	2 <sup>nd</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine	2007
Dissection Course Organizer	NASBS	2007
Scientific Program Committee	CNS	2007
Practical Courses Committee	CNS	2007
Faculty Lecturer	Oncology Summit: Discovery to Delivery	2008
Faculty, Breakfast Seminar	AANS, Parasellar Surgery	2008
Faculty, Practical Course	AANS, Intracranial Endoscopy	2008
Scientific Committee	3 <sup>rd</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine	2008
Course Director, CNS	How to Write an NIH Grant	2008
Research Committee	AANS	2008
Research Committee	NASBS	2008
Van Wagenen Selection Cmtee	AANS	2008
Dissection Course Organizer	NASBS	2008
Academic Community Alliance	CNS	2008
Scientific Program Committee	CNS	2008
Session Moderator	Brain Tumor Awareness Day, NYU	2008
Mentor for Junior Investigators	AES	2008
Scientific Program Committee	AES	2008-10
Seminar Chair	Rhinology 2009	2009
Faculty, Breakfast Seminar	AANS, Parasellar Surgery	2009
Faculty, Breakfast Seminar	AANS, Open vs Endoscopic Skull Base Surgery	2009
Faculty, Practical Course	AANS, Intracranial Endoscopy	2009
Scientific Advisory Board	The Brain Tumor Foundation	2009-13
Faculty, Breakfast Seminar	NASBS, New instruments and Technology	2009
Faculty, Skull Base Dissection	NASBS, Sellar and Suprasellar Approaches	2009
Faculty, Resident Seminar	NASBS, Endoscopic Management of Chordomas	2009
Leader, Sunrise Session	Society for Neuro-Oncology, Endoscopy	2009
Faculty, Luncheon Seminar	CNS, Pituitary Tumors	2009
Comm. on Applicants, Manhattan	American College of Surgeons	2009
Course Director, IW	AES	2009
Board of Trustees	Scarsdale Youth Hockey	2009-11
President	Medical Strollers	2010
Chair, Van Wagenen Committee	AANS	2010

Moderator, Luncheon Seminar	4th World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine	2010
Moderator, Afternoon Seminar	3 <sup>rd</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine	2010
Faculty, Breakfast Seminar	AANS, Parasellar Surgery	2010
Faculty, Practical Course	AANS, Intracranial Endoscopy	2010
Moderator, Breakfast Seminar	ASSFN	2010
Faculty	Emory University Neuro-Endoscopy Course	2010
Comm. on Applicants, Manhattan Scientific Program Committee	American College of Surgeons	2010
Course Director	CNS	2010
Faculty, Luncheon Seminar	CNS, Intracranial Endoscopy	2010
Course Director	CNS, Skull Base Endoscopy	2010
Chair	Endoscopic Skull Base Surgery, Anspach	2010
Invited International Faculty	Van Wagenen Selection Committee	2010
	Anterior Skull Base Surgery Workshop, Mumbai, India	2011
Faculty, Skull Base Dissection	NASBS, Sellar and Suprasellar Approaches	2011
Scientific Program Director	Neurosurgical Society of America	2011
Comm. on Applicants, Manhattan	American College of Surgeons	2011
Faculty, Breakfast Seminar	Parasellar Surgery, AANS	2011
Faculty	CNS 3D Surgical Anatomy Course	2011
Faculty	Masters in Neuroendoscopy, CNS	2011
Course Director	Endoscopic Skull Base Surgery, Anspach	2011
Session Organizer	Sunrise Session, Society for Neuro-Oncology	2011
Course Co-Director	Epilepsy and Brain Tumor SIG, AES	2011
Faculty	Annual Masters Course in Skull base Surgery, USF	2012
Faculty, Skull Base Dissection	NASBS, Sellar and Suprasellar Approaches	2012
Faculty, 3D Endoscopy Course	Montefiore Institute for Min Invas. Surg	2012
Faculty, Luncheon Seminar	AANS Spine section Meeting	2012
Honored Guest	Changzheng Hospital, Shanghai, China	2012
Editorial Board	Frontiers in Neuro-Oncology	2012
International Faculty	5 <sup>th</sup> World Congress Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Austria	2012
Abstract Reviewer	Tumor section, AANS	
Faculty	Transsphenoidal Surgery Workshop, AANS	2012
Faculty, Breakfast Seminar	Parasellar Surgery, AANS	2012
Honored Guest Lecturer	Society for British Neurosurgery	2012
Panelist	University of Neurosurgery Webinar	2012
Chair, Research Committee	NASBS	2012
Guest Faculty	11 <sup>th</sup> Ann Intl Neuro-Onc Update, Johns Hopkins	2012
Faculty	Masters in Neuroendoscopy, CNS	2012
Faculty, Luncheon Seminar	Skull Base Endoscopy. Utility and Limitations, CNS	2012
Faculty, Luncheon Seminar	Open Skull Base Surgery, CNS	2012
Seminar Organizer	Brachytherapy for Resected Brain Metastases, SNO	2012
Abstract Reviewer	Tumor Satellite Meeting, AANS	2013
Scientific Advisory Committee	Tumor Satellite Meeting, AANS	2013
Faculty, Skull Base Dissection	NASBS, Sellar and Suprasellar Approaches	2013
Lecturer, Practical Course	North American Skull Base Society	2013

Panelist	North American Skull Base Society	2013
Moderator, Breakfast Seminar	North American Skull Base Society	2013
Plenary Lecture	North American Skull Base Society	2013
Abstract Reviewer	Tumor Satellite Meeting, CNS	2013
Honored Guest Lecturer	NUHS, Singapore	2013
Faculty, Practical Course	AANS, Intracranial Endoscopy	2013
Faculty, Practical Course	AANS, Transsphenoidal Surgery	2013
Faculty, Practical Course	AANS, Brain Neoplasms Update	2013
Faculty, Breakfast Seminar	AANS, Parasellar Surgery	2013
Symposium Lecture	AANS, The Future of Skull Base Surgery	2013
Symposium Lecture	AANS, Stereotactic and Functional Section	2013
Faculty	SNS Junior Resident Course “Bootcamp”	2013
Plenary Lecture	ILAE Meeting, Montreal	2013
Plenary Lecture	Mexican Neurosurgical Congress	2013
Guest Examiner	American Board of Neurological Surgery	2013
Head Trauma Consultant	NFL-NY Giants	2013
Plenary Lecture	Endo v Open Skull Base Surgery CNS	2013
Faculty, Luncheon Seminar	Skull Base Surgery, CNS	2013
Faculty	Methodist Skull Base Course	2013
Faculty	Emory Neuro-Endoscopy Course	2013
Panelist	North American Skull Base Society	2014
Board of Trustees	The Dalton School	2014
Plenary Lectures	Columbian Symposium on Oncology	2014
Faculty, Practical Course	Transsphenoidal Surgery, AANS	2014
Faculty, Practical Course	Masters in Endoscopic Surgery, AANS	2014
Moderator	Tumor-Related Epilepsy, AANS	2014
Invited Faculty		
Faculty	SNS Junior Resident Course- Bootcamp II	2014
Faculty	Duke/Methodist Cerebrovascular and Skull Base	2014
Long-Range Planning Committee	Neurosurgical Society of America	2014
Faculty	UCSF Neurosurgery Update 2014	2014
International Faculty	European Assoc. Neurosurgical Societies	2014
Faculty	Brain Tumor Update Course, CNS	2014
Plenary Lecture	Epilepsy Society of Australia	2014
Guest Faculty	Emory Neuro-endoscopy Course	2014
Local Arrangements Committee	Neurosurgical Society of America	2015
Long Range Planning Committee	Neurosurgical Society of America	2015
Faculty	Transsphenoidal Surgery, AANS	2015
Faculty	Open v Endoscopic Skull Base Approaches, AANS	2015
Faculty	SNS Junior Resident Course- Bootcamp II	2015
Surgeon	Mission Brain Guadalajara, Mexico	2015
Plenary Lecture	Mexican Neurosurgical Congress	2015
Faculty	Brain Tumor Update Course, CNS	2015
Faculty	Endoscopic and Keyhole Cranial Surgery, CNS	2015
Faculty	Reconstructive Skull Base Course, CNS	2015
Faculty	Inaugural One Health Veterinary Conference	2015
Guest Lecturer	4 <sup>th</sup> Symposium on Endoscopic Surgery, Turkey	2015
Faculty	4 <sup>th</sup> Annual Barrow Neuro-Oncology Symposium	2015



Meeting Organizer	Optics and the Brain	2016
Guest Lecturer	2 <sup>nd</sup> International Congress of Neurosurgery, Egypt	2016
Faculty	Transsphenoidal Surgery, AANS	2016
Faculty	Brain Tumor Update, AANS	2016
Faculty	Open v Endoscopic Skull Base Approaches, AANS	2016
Congress President	7 <sup>th</sup> World Congress Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Chicago	2016
Guest Lecturer/Moderator	7 <sup>th</sup> World Congress Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Chicago	2016
Chair	Van Wagenen Fellowship Selection Committee	2016
Advisory Board	Acta Neurochirurgica	2016
Moderator, Luncheon Seminar	Nonfunctioning pituitary adenomas, CNS	2016
Faculty	Advanced Skull Base Surgery Course, Barcelona	2016
Faculty	CNS Webinar, Endoscopic Suprasellar Approaches	2017
Faculty	Brain Tumor Update, AANS	2017
Faculty	Open v Endoscopic Skull Base Approaches, AANS	2017
Faculty	Spanish Skull Base Society Meeting	2017
Plenary Lecture	XXVIII Columbian Congress of Neurosurgery	2018
Chair, Editorial Board	Journal of Neurosurgery	2018
Faculty	Endoscopic Skull Base Practical Session, AANS	2018
Faculty	Open v Endoscopic Skull Base Approaches, AANS	2018
Faculty	World Course in Advanced Brain tumor Surgery	2018
Faculty	Pre-Congress Dissection Course, EndoBarcelona	2018
Scientific Program Committee	8 <sup>th</sup> World Congress Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Barcelona	2018
Dissection Expert	8 <sup>th</sup> World Congress Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Barcelona	2018
Faculty	7 <sup>th</sup> Ann. World Course in Adv. Brain Tumor Surgery	2018
Plenary Lecture	Congress of Neurosurgery	2018
Faculty	Case-Based Discussions, CNS	2018
Member	ILAE/AES Joint Translational Task Force	2018
Faculty	Palm Beach Course in Complex Neurosurgery	2019
Medical Advisory Board	Cushing Support and Research Foundation	2019
Faculty	World Course in Advanced Brain tumor Surgery	2019
Medical Advisory Board	ReDeisgn Health	2019
Faculty	International Masters in Brain Tumor Surgery	2019
Faculty	CNS Town Hall Xperience	2020
Faculty	International Web-Based Nerosurgery Congress	2020
Faculty	Rhinology Fellow Educational Webinar	2020
Faculty	Moroccan Neurosurgical Society	2020
Faculty	CNS, Virtual Visiting Professsor	2020
Faculty	U Miami Cerebrovasc & Skull Base Int'l Symposium	2020
Guest Emiritus	Jaipur Skull Base Live Surgery Course, India	2020
Faculty	9 <sup>th</sup> Int'l Masters Course in Brain Tumor Surgery	2020
Advisory Board	Mission:Brain Foundation	2020
Faculty	Neurosurgical Atlas Grand Rounds	2020
Faculty	GleioLearn	2020
Guest Lecture	Advancements in Neurosurgery, Pakistan	2021

Faculty	NASBS Virtual Workshop	2021
Faculty	Medical Student Neurosurgery Seminar Series	2021
Faculty	IFNE Virtual Workshop in Neuroendoscopy	2021
Faculty	AANS Front Row Series	2021
Faculty	10th WFNS Neuroanatomy Committee Webinar	2021
Faculty	IWBNC	2021
Faculty	Columbia Endoscopic Surgery Course	2021
Plenary Lecture	NSA	2021
Faculty	10 <sup>th</sup> Int'l Masters Course in Brain Tumor Surgery	2021
Faculty	Ann. Southern California Pituitary Symposium at USC	2021
Faculty	Parasellar Tumor Symposium, CNS	2021
Faculty	Singapore University, Cushing's Symposium	2021
Faculty	1 <sup>st</sup> Int'l Transorbital Surgery Workshop, Barcelona	2021
Keynote Lecture	Neuroendoscopy Society of India Webinar	2021
Faculty	Wash U. Skull Base Course	2021
Faculty	NASBS Skull Base Surgery Virtual Workshop	2021
Faculty	1 <sup>st</sup> Virtual Intl Symposium, Columbia Assoc NSurg	2021
Faculty	Multiportal Approaches to Skull Base, Salerno, Italy	2022
Guest Lecture	Pakistan Society of Neuro-Oncology	2022
Guest Lecture	34 <sup>th</sup> Japanese Soc. for Skull Base Surgery	2022
Faculty	Univ. of Miami Skull Base Symposium	2022
Faculty	16 <sup>th</sup> Asian Australasian Society for Neurosurgery	2022
Faculty	Complex Skull Base Surgery Symposium, CNS	2022
Faculty	Asian Congress of Neurosurgery Webinar	2022
Faculty	3 <sup>rd</sup> Intl Course on Transorbital Surgery, Barcelona	2022
Faculty	North American Skull Base Surgery Meeting	2023
Faculty	Virtual Spine	2023
Medical Board	Mission:Brain	2023
Scientific Advisory Board	Precision Neuroscience	2023
Faculty	6 <sup>th</sup> Ann. Columbia Endoscopy Course	2023

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## Patents

1. Intracranial electro-optical sensor. Co-Inventor. US Patent 9,521,955 B2. Granted Dec 20, 2016
2. Obdurator to convert METRx scir retractor for brain surgery CRF D-4213-01  
Inventor, Application submitted by Weill Cornell Medical College, Technology Transfer Office
3. Apparatus and method for producing sub-surface cortical cuts to halt epileptic seizures.  
Co-Inventor, Attorney Docket 1258-4997, Submitted by Cornell University
4. Use of an anterior approach for fusion of the craniocervical area and upper cervical spine.  
6042-01-US Co-Inventor, Application submitted by Weill Cornell Medical College,  
Technology Transfer Office
5. Face-mounted negative pressure antechamber for endoscopic procedures. Co-Inventor,  
EFS ID 39386708, Application 63121722

## Invited Lectures/Oral Presentations

1. “Lessons Learned in 25 Years of Minimally Invasive Anterior Skull Base Surgery,”  
NEWS Webinar, January 6, 2024.
2. “Lessons Learned in 25 Years of Minimally Invasive Anterior Skull Base Surgery,”  
Mealey Lecture in Neuro-Oncology, Department of Neurosurgery, Indiana University  
Health System, Nov. 15, 2023.
3. “Controversies in Craniopharyngiomas and Rathke Cleft Cyst Surgery,” 4<sup>th</sup> Cornell  
Pituitary Symposium, Weill Cornell Medicine, Nov 11, 2023.
4. “Surgery for Functional Adenomas,” 4<sup>th</sup> Cornell Pituitary Symposium, Weill Cornell  
Medicine, Nov 11, 2023.
5. “Surgery for Non-Hormone Producing Tumors,” 4<sup>th</sup> Cornell Pituitary Symposium, Weill  
Cornell Medicine, Nov 11, 2023.
6. “Transorbital surgery for sphenoidal meningiomas,” Neurosurgical Society of  
America, Chatham, MA, June 19, 2023.
7. “Predictor of Recurrence Following Endonasal Endoscopic Resection of  
Craniopharyngiomas,” Neurosurgical Society of America, Chatham, MA, June 19, 2023.
8. “Endonasal, Supraorbital, Transorbital Skull base Surgery,” Endonasal, Supraorbital,  
Transorbital Skull base Surgery, Cornell CME Course, New York, NY, June 9, 2023
9. “Transorbital Approach to the Middle Fossa,” 6<sup>th</sup> Annual Columbia Endoscopy Course,  
Columbia-Presbyterian, New York, NY, June 1, 2023.
10. “The Case for Endonasal Resection of Planum Sphenoidale and Tuberculum Sella  
Meningiomas and the Case Against the Simpson Grade.” American Association of  
Neurological Surgeons, Los Angeles, CA, April 24, 2023
11. “Endonasal Odontoidectomy,” Virtual Spine, University of Arizona, Department of  
Neurosurgery, March 23, 2023.
12. “Transorbital Skull Base Surgery,” North American Skull Base Society Tampa, FL, Feb  
17, 2023.
13. “Gliosis versus Cesium-131 Brachytherapy for Brain Tumors” American Brachytherapy  
Society Webinar, Feb 14, 2023.
14. “Minimally Invasive Skull Base Surgery. Lessons Learned over 25 Years,” Department of  
Neurosurgery Grand Rounds, Johns Hopkins Department of Neurosurgery, January 5,  
2023.

15. "Endonasal versus Supraorbital versus Transorbital Removal of Meningiomas," 3<sup>rd</sup> International Hands-On Workshop Endoscopic Transorbital Skull Base Surgery, Barcelona, Spain, Nov 10-11, 2022.
16. "Keyhole Skull Base Surgery" Asian Congress of Neurosurgery Webinar, October 22, 2022.
17. "When are Keyhole Approaches Preferred?" Complex Skull Base Lunch Seminar, Congress of Neurosurgery, San Francisco October 11, 2022.
18. "Lesson Learned after 25 Years of Endoscopic Skull Base Surgery," Charles Fager Lecture, Lahey Clinic, September 21, 2022.
19. "Anatomy of the Skull Base" 16<sup>th</sup> Asian Australasian Society for Neurosurgery, Jerusalem, Israel, Sept 5, 2022.
20. "Endoscopic Resection of Skull Base Meningiomas," 16<sup>th</sup> Asian Australasian Society for Neurosurgery, Jerusalem, Israel, Sept 5, 2022.
21. "Pituitary Tumors: How I Do It?" 16<sup>th</sup> Asian Australasian Society for Neurosurgery, Jerusalem, Israel, Sept 5, 2022.
22. "Endoscopic Skull Base Surgery Videos," 16<sup>th</sup> Asian Australasian Society for Neurosurgery, Jerusalem, Israel, Sept 5, 2022.
23. "Meningiomas: When To Treat. How Much To Remove," 16<sup>th</sup> Asian Australasian Society for Neurosurgery, Jerusalem, Israel, Sept 5, 2022.
24. "Minimally Invasive Anterior Skull Base Surgery. Lessons Learned over 25 Years," Grand Rounds, University of Pennsylvania, Department of Neurosurgery, Philadelphia, PA, July 28, 2022.
25. "Minimally Invasive Anterior Skull Base Surgery. Lessons Learned over 25 Years," 27<sup>th</sup> Annual Van Wagenen Lecturer, University of Rochester, Rochester NY, June 24, 2022.
26. "Craniopharyngiomas. GTR versus STR plus Radiation," University of Miami Cerebrovascular and Skull Base International Symposium, June 16, 2022.
27. "Transorbital Endoscopic Skull Base Surgery. The Cornell Experience," Weill Cornell Medicine CME course, June 3-4, 2022.
28. "Transorbital versus Supraorbital Approach to the Anterior Skull Base," Weill Cornell Medicine CME course, June 3-4, 2022.
29. "Transorbital Approaches to the Skull Base" 34<sup>th</sup> Annual Meeting of the Japanese Society for Skull Base Surgery, Japan, July 7, 2022.
30. "Endoscopic skull base surgery. Lessons learned over 20 years," Pakistan Society of Neuro-Oncology Webinar, May 7, 2022.
31. "Thoughts on Endoscopic Pituitary Surgery," American Association of Neurological Surgeons, Philadelphia, PA, May 2, 2022
32. "The Case for Endonasal Resection of Planum Sphenoidale and Tuberculum Sella Meningiomas and the Case Against the Simpson Grade." American Association of Neurological Surgeons, Philadelphia, PA, May 1, 2022
33. "Transorbital Approach(es) to the Skull Base. The Cornell Experience" Grand Rounds, The Neurosurgical Atlas, April 7, 2022.
34. "Transorbital Approach(es) to the Skull Base. The Cornell Experience" Minifellowship: Multiportal Approaches to the Skull Base, Salerno, Italy, March 28, 2022
35. "Endoscopic endonasal surgery of pituitary lesions" 1<sup>st</sup> Virtual International Symposium: "Neurosurgery Through an Endoscope." Columbian Association of Neurosurgery Feb 12, 2022.
36. "The Transorbital approach" NASBS Skull Base Surgery Virtual Workshop, Dec 9, 2021

37. “The Transorbital approach. Graded Learning Curve” Wash U. Skull Base Dissection Course, St. Louis, MO, Dec 4, 2021.
38. “Minimally invasive approaches to the cavernous sinus” Keynote Lecture, Neuroendoscopy Society of India Webinar Series, Nov. 20, 2021
39. “Minimally invasive skull base surgery. Lessons learned over 20+ years. Neurosurgery Grand Rounds, The Barrow Neurological Institute, Phoenix, AZ, Nov 19, 2021
40. “The Transorbital approach. The Cornell Experience” 1<sup>st</sup> International Hands-on Workshop Endoscopic Transorbital Surgery, Barcelona, Spain, Nov 8-9, 2021.
41. “Surgical management of Cushing’s Disease”, National University Hospital of Singapore, Updates in the Medical and Surgical Management of Pediatric and Adult Cushing’s Disease, October 29, 2021.
42. “Endoscopic management of planum and tuberculum meningiomas” Congress of Neurosurgery, Austin, TX, Oct 19, 2021.
43. “Endoscopic resection of functional adenomas”, Weill Cornell Pituitary Tumor Symposium, Oct 15, 2021.
44. “Complex decision-making in pituitary adenoma surgery”, Weill Cornell Pituitary Tumor Symposium, Oct 15, 2021.
45. “Craniopharyngioma” Annual Southern California Pituitary Symposium at USC, Oct 2, 2021.
46. “Endoscopic pituitary surgery” The Master X Annual Live World Course in Brain & Spine Tumor Surgery, August 13, 2021.
47. “Expanded endoscopic skull base surgery: Where are we going?” Plenary Lecture, Neurosurgical Society of America, Lake Tahoe June 21, 2021.
48. “Transorbital approaches to the cavernous sinus and Meckel’s cave”, Columbia Endoscopic Surgery Course, June 10, 2021
49. “Minimally invasive surgery for anterior skull base meningiomas” International Web-Based Neurosurgery Conference. May 28, 2021.
50. “Tubular surgery for brain tumors”, Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.
51. “Supraorbital eyebrow and transorbital approaches to the skull base” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.
52. “Laser interstitial thermotherapy for tumors and epilepsy” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.
53. “Endoscopic endonasal skull base approaches” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.
54. “Laser Interstitial Thermal Therapy for Epilepsy” 10th WFNS Neuroanatomy Committee Webinar, May 19, 2021.
55. “The Learning Curve in Endonasal Endoscopic Surgery. Milestones: From a Novice to a Master Surgeon, AANS Front Row Series, April 22, 2021.
56. “Pros and Cons of Endonasal Approach to Olfactory Groove Meningiomas”, IFNE Virtual Workshop in Neuroendoscopy, April 8, 2021.
57. “Advances in Minimally Invasive Skull Base and Tumor Surgery”, Medical Student Neurosurgery Seminar Series, Feb. 20, 2021.
58. “Lessons learned in minimally invasive skull base surgery” Grand Rounds, USC Department of Neurosurgery, Los Angeles, CA, Jan 29, 2021.
59. “Endoscopic resection of pituitary tumors” Advances in Neurosurgery Webinar, Shifa Medical Center, Islamabad, Pakistan, Jan 23, 2021.

60. “Cell-specific optical mapping of seizures” Dandy Romanian-German Medical Student Neurosurgical Society Webinar, Dec 4, 2020.
61. “Transorbital endoscopic surgery”, NASBS Virtual Workshop, Nov. 17, 2020
62. “Cell-specific imaging of seizure onset and propagation through the epileptic network” Department of Neurology Grand Rounds, Albert Einstein College of Medicine, New York, NY, Oct. 9, 2020
63. “Use of 5-ALA for keyhole brain tumor surgery” GleoLearn Webinar, Oct 8, 2020.
64. “Delays in administering SRS to the cavity and the role for brachytherapy in resected brain metastases” Hematology-Oncology Grand Rounds, Weill Cornell Medicine, Sept 25, 2020.
65. “Endonasal skull base surgery. Lessons learned over 20 years” Neurosurgical Atlas Grand Rounds, Sept 14, 2020
66. “Endonasal resection of giant pediatric craniopharyngioma”, 9<sup>th</sup> Int’l Masters Course in Brain Tumor Surgery, London, England August 14, 2020
67. “Endoscopic approaches to the anterior skull base”, 9<sup>th</sup> Int’l Masters Course in Brain Tumor Surgery, London, England August 15, 2020
68. “Anterior skull base meningiomas” University of Miami Cerebrovascular and Skull Base International Symposium, July 30, 2020.
69. “Anterior skull base anatomy from the endonasal perspective” CNS Virtual Visiting Professor, July 29, 2020.
70. “Efficacy and durability of endoscopic endonasal resection of craniopharyngiomas and meningiomas,” 11<sup>th</sup> Singapore Sleep, Allergy & Rhinology Conference, July 17, 2020.
71. “Minimally invasive approaches for skull base meningiomas”, Virtual Neurosurgery Conference, Fundación Universitaria de Ciencias de la Salud, Bogota, Columbia June 24, 2020.
72. “Long-term outcomes after endoscopic craniopharyngioma surgery”, Moroccan Society of Neurosurgery, May 30, 2020.
73. “Efficacy and durability of endoscopic endonasal resection of craniopharyngiomas and meningiomas,” International Web-Based Neurosurgery Congress, Centro por Investigación y Entrenamiento en Neurocirujía, May 21, 2020
74. “Long-term outcomes after endoscopic pituitary surgery”, Miami Global Brain Tumor Symposium, May 13, 2020.
75. “Tubular surgery for brain tumors”, Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
76. “Supraorbital eyebrow and transorbital approaches to the skull base” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
77. “Laser interstitial thermotherapy for tumors and epilepsy” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
78. “Endoscopic endonasal skull base approaches” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
79. “Choosing the best approach” Primer Course, North American Skull Base Society Meeting, San Antonio, TX, Feb 7, 2020.
80. “Fluorescent imaging in skull base surgery” Hot Topics, North American Skull Base Society Meeting, San Antonio, TX. Feb 8, 2020.
81. “3D endoscopy in skull base surgery” Video Sessions, North American Skull Base Society Meeting, San Antonio, TX. Feb 8, 2020.
82. “Controversies in Minimally Invasive Skull Base Surgery”, Neurology Grand Rounds, Methodist Hospital, Brooklyn, NY Feb 5, 2020.

83. “Controversies in Minimally Invasive Skull Base Surgery”, Webinar hosted by Hospital Universitario de la Samaritana – Hospital Universitario Mayor Méderi Director, CIEN Center for Research and Training in Neurosurgery, Bogota, Columbia, Feb 3, 2020.
84. “Controversies in Minimally Invasive Skull Base Surgery” Grand Rounds, Brigham and Women’s Hospital, Boston, MA Jan 22, 2020.
85. “Recent advances in pituitary surgery” Endocrinology Grand Rounds, Division of Endocrinology, Weill Cornell Medicine, New York, NY Dec 4, 2019.
86. “Re-operation for Pituitary Tumors” Pituitary Tumors: Medical, Surgical and Radiotherapy Treatment Options, Webinar, Pituitary Network Association, November 9, 2019.
87. “Imaging epilepsy in the brain” Department of Neurology Grand Rounds, Brooklyn Methodist Hospital, New York, NY, October 23, 2019.
88. “Operative techniques in pituitary surgery” International Masters in Brain Tumor Surgery Symposium, Congress of Neurosurgery, October 21, 2019.
89. “Re-operation for Pituitary Tumors” Pituitary Tumors: Medical, Surgical and Radiotherapy Treatment Options, Weill Cornell Medicine, October 11, 2019.
90. “Neuropsychology and epilepsy surgery” Neurosurgery and Beyond, Department of Neurosurgery CME, Weill Cornell Medicine Sept 26, 2019.
91. “How long is the surgical learning curve? 1000 consecutive endoscopic skull base cases” The Alfred Washington, Adson Distinguished Lecture, Mayo Clinic, Jacksonville, Florida, September 16, 2019.
92. “Endoscopic pituitary surgery: how I do it”, Eighth Annual World Course in Advanced Brain Tumor Surgery, London July 20, 2019.
93. “Surgical anatomy of the sellar region”, Eighth Annual World Course in Advanced Brain Tumor Surgery, London July 20, 2019.
94. Live Surgical Demonstration, Eighth Annual World Course in Advanced Brain Tumor Surgery, London July 18, 2019.
95. “Tubular surgery for brain tumors”, Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 7, 2019.
96. “Supraorbital eyebrow and transorbital approaches to the skull base” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 7, 2019.
97. “Laser interstitial thermotherapy for tumors and epilepsy” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 8, 2019.
98. “Endoscopic endonasal skull base approaches” Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 8, 2019.
99. “Intracavitary Cesium 131 for resection brain metastases” Brain Metastasis Symposium, Weill Cornell Medicine, New York, NY May 9, 2019.
100. “The nose for neurosurgeons” 1<sup>st</sup> Annual Weill Cornell Palm Beach Course on Complex Approaches in Neurosurgery, Palm Beach, FL April 3, 2019.
101. “The endonasal suprasellar approach for complex skull base tumors”, 1<sup>st</sup> Annual Weill Cornell Palm Beach Course on Complex Approaches in Neurosurgery, Palm Beach, FL April 3, 2019.
102. “Controversies in endoscopic craniopharyngioma surgery. Transcranial or endonasal? Preserve or sacrifice the stalk?” 16<sup>th</sup> International Pituitary Congress, New Orleans, LA, March 22, 2019.
103. “Endoscopic craniopharyngioma surgery. Preserve or sacrifice the stalk?” 3<sup>rd</sup> Annual Meeting of Korean Society of Endoscopic Neurosurgery, Seoul, South Korea, February 9, 2019.



104. “Transcranial versus endonasal surgery for suprasellar meningiomas” 3<sup>rd</sup> Annual Meeting of Korean Society of Endoscopic Neurosurgery, Seoul, South Korea, February 9, 2019.
105. “Minimally Invasive Approaches to Decompress the Optic Apparatus” Robert M Ellsworth Lecture, Department of Ophthalmology, Weill Cornell Medicine, New York, NY, January 10, 2018.
106. “Minimally invasive cranial neurosurgery” Grand Rounds, Department of Neurosurgery, Groote Schuur hospital, Cape Town, South Africa Dec 27, 2018.
107. “Endoscopic resection of meningiomas and craniopharyngiomas” Grand Rounds, Department of Neurosurgery, St. Barnabas Hospital, Livingston, NJ, November 14, 2018.
108. “Pituitary surgery in pregnant women and the elderly” Pituitary Disorders Across the Age Spectrum, Weill Cornell Medicine, October 19, 2018.
109. “Endoscopic skull base surgery. Finding but not pushing the edge of the envelope. Plenary Lecture, Congress of Neurosurgery, Houston Texas, October 9, 2018
110. “Planum/tuberculum meningioma”. Case-Based Discussions, Congress of Neurosurgery, Houston, Texas, October 8, 2018.
111. “Endoscopic pituitary surgery: how I do it”, Seventh Annual World Course in Advanced Brain Tumor Surgery, London July 14, 2018.
112. Live Surgical Demonstration, Seventh Annual World Course in Advanced Brain Tumor Surgery, London July 13, 2018.
113. “Endoscopic transplanum approach”, Pre-Congress Skull Base Dissection Course, EndoBarcelona, 8<sup>th</sup> World Congress of Endoscopic Surgery of Paranasal Sinuses, Skull Base, Brain and Spine, Barcelona, Spain, July 4, 2018.
114. “Safe corridors for endonasal approaches to the brainstem”, EndoBarcelona, 8<sup>th</sup> World Congress of Endoscopic Surgery of Paranasal Sinuses, Skull Base, Brain and Spine, Barcelona, Spain, July 6, 2018.
115. “Endoscopic endonasal surgery for chondrosarcomas”, EndoBarcelona, 8<sup>th</sup> World Congress of Endoscopic Surgery of Paranasal Sinuses, Skull Base, Brain and Spine, Barcelona, Spain, July 7, 2018.
116. “To sacrifice or preserve the stalk in endonasal craniopharyngioma surgery” NSA meeting, Jackson Hole, WY, June 11, 2018
117. “Endoscopic transcribriform versus supraorbital approach to the anterior fossa”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 1-2, 2018.
118. “Anatomy of the anterior skull base”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 1-2, 2018.
119. “Endoscopic resection of meningiomas and craniopharyngiomas”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May June 1-2, 2018.
120. “Endoscopic translival transodontoid approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 1-2, 2018.
121. “Endoscopic resection of meningiomas: creating and fair comparison” Open versus Endoscopic Approaches to the Anterior Skull Base, AANS New Orleans, May 1, 2018.
122. “Anterior skull base approaches” Practical Clinic, AANS New Orleans, April 29, 2018.
123. “Endonasal versus transcranial surgery for craniopharyngiomas” XXVIII National Congress of Neurosurgery, Baranquilla, Columbia March 8, 2018.
124. “Anterior skull base meningiomas. Algorithm for minimally invasive approaches” XXVIII National Congress of Neurosurgery, Baranquilla, Columbia March 8, 2018.

125. "Intracavitary Cesium-131 brachytherapy for brain metastases" XXVIII National Congress of Neurosurgery, Baranquilla, Columbia March 8, 2018.
126. "Endoscopic resection of hormone producing pituitary adenomas" Reproductive endocrinology grand rounds, Weill Cornell Medical College, New York, NY Dec. 20, 2017.
127. "Endoscopic treatment of pituitary macroadenomas" Pituitary Tumors: Treatment and Diagnostic Dilemmas. Weill Cornell CME, New York, NY Oct 27, 2017.
128. "Endoscopic resection of skull base meningiomas" 13<sup>th</sup> National Congress of the Spanish Skull Base Society, Valencia, Spain Oct 5, 2017.
129. "Endoscopic resection of craniopharyngiomas" 13<sup>th</sup> National Congress of the Spanish Skull Base Society, Valencia, Spain Oct 5, 2017.
130. "Endoscopic resection of pituitary adenomas" 13<sup>th</sup> National Congress of the Spanish Skull Base Society, Valencia, Spain Oct 5, 2017.
131. "Femtosecond multiphoton microtransection of supragranular layers attenuate seizure initiation and propagation in vivo" The American Academy of Neurological Surgeons. Sana Barbara California, Sept 12, 2017.
132. "The endoscopic view: multiangled and multidimensional", Twenty Years of Neuroendoscopy. History, Ideas and Friends on the Gulf of Naples, Universita Degli Studi Napoli Federico II, Naples, Italy, May 26, 2017.
133. "Endoscopic transcribriform versus supraorbital approach to the anterior fossa", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 19-20, 2017.
134. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 19-20, 2017
135. "Endoscopic resection of meningiomas and craniopharyngiomas", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 19-20, 2017.
136. "Endoscopic transclival and transodontoid approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 19-20, 2017.
137. "Endoscopic resection of meningiomas: creating and fair comparison" Open versus Endoscopic Approaches to the Anterior Skull Base, AANS Los Angeles, April 23, 2017.
138. "Open versus endoscopic approaches to skull base tumors" Brain Tumor Update Course, AANS Los Angeles, April 22, 2017.
139. "Endoscopic Transsphenoidal Approaches", Plenary Lecture, Saudi Arabia Neurosurgical Society, Riyadh, Saudi Arabia, April 9, 2017.
140. "Does the chiasmal-pituitary corridor matter in endoscopic endonasal surgery for craniopharyngiomas" NSA Meeting, Ponte Vedra Beach, Florida April 3, 2017.
141. "Endoscopic resection of craniopharyngiomas" CNS Webinar, Suprasellar Approaches, March 29, 2017
142. "Gasket seal closure of skull base and use of lumbar drains", North American Skull Base Society Meeting, New Orleans, LA, March 4, 2017
143. "Minimally invasive skull base surgery" Neuro-oncology Update, Weill Cornell Medical College, New York Presbyterian Hospital, New York, NY March 3, 2017.
144. "Endoscopic resection of meningiomas and craniopharyngiomas" Neurosurgery Grand Rounds. St. Barnabas Hospital., New Jersey Feb. 8, 2017.
145. "Endoscopic approach for craniopharyngiomas" Advanced Endoscopic Skull Base Surgery, Barcelona, Spain, Nov. 10, 2016.

146. “Endoscopic approach for acromegaly” Advanced Endoscopic Skull Base Surgery, Barcelona, Spain, Nov. 9, 2016.
147. “Endoscopic approaches to the anterior skull base” INOVA Endoscopic Pituitary and Anterior Skull Base Course, Oct. 8, 2016.
148. “Endoscopic approaches to the clivus and craniovertebral junction” INOVA Endoscopic Pituitary and Anterior Skull Base Course, Oct. 8, 2016.
149. “Endoscopic transpterygoid approach to the cavernous sinus” Endoscopic Skull Base Course, Congress of Neurosurgery, Sept 25, 2016.
150. “Closure of the skull base” Pituitary Adenoma Course, Congress of Neurosurgery, Sept 25, 2016.
151. “Endoscopic resection of suprasellar and cavernous sinus extension in pituitary adenomas, “ Luncheon Seminar, Nonfunctioning Pituitary Adenomas. Congress of Neurosurgery, Sept 26, 2016.
152. “Glial waves are triggered by seizures and play no role in initiation of ictal event of neurovascular coupling” Academy of Neurological Surgeons, Jackson Hole Wyoming, Sept. 15, 2016.
153. “Endoscopic transcribriform versus supraorbital approach to the anterior fossa”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2016.
154. “Endoscopic resection of meningiomas and craniopharyngiomas”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2016.
155. “Endoscopic transclival and transodontoid approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2016.
156. “Extended endonasal endoscopic approaches for invasive and giant pituitary adenomas” “Clival chordomas” EndoChicago, 7<sup>th</sup> World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 15, 2016.
157. “Quality of life after endoscopic resection off craniopharyngiomas”, EndoChicago, 7<sup>th</sup> World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 16, 2016.
158. “Endoscopic surgery in the cavernous sinus”, EndoChicago, 7<sup>th</sup> World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 18, 2016.
159. “Lumbar drains in endonasal skull base surgery”, EndoChicago, 7<sup>th</sup> World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 18, 2016.
160. “Managing arterial injury in endoscopic skull base surgery”, EndoChicago, 7<sup>th</sup> World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 18, 2016.
161. Endoscopic resection of meningiomas: creating and fair comparison” Open versus Endoscopic Approaches to the Anterior Skull Base, AANS Chicago, May 2, 2016.
162. “Extended endonasal endoscopic approaches for invasive and giant pituitary adenomas” Practical and Technical Aspects of Transsphenoidal Surgery, AANS Chicago, April 30, 2016.
163. “Open versus endoscopic approaches to skull base tumors” Brain Tumor Update Course, AANS Chicago, April 30, 2016.
164. “Endoscopic transplanum approach to craniopharyngiomas and meningiomas”, 2<sup>nd</sup> Annual International Congress of Neurosurgery, Ain Shams University, Cairo, Egypt, April 7, 2016.

165. “Endoscopic approaches to the clivus, cavernous sinus and Meckels cave”, 2<sup>nd</sup> Annual International Congress of Neurosurgery, Ain Shams University, Cairo, Egypt, April 7, 2016.
166. “Endoscopic skull base surgery: Lessons learned” 2016 Winter Clinics for Cranial and Spinal Surgery. Snowmass, CO, Feb 24, 2016.
167. “Minimally Invasive Brain Surgery” Grand Rounds, Department of Rehabilitation Medicine, Weill Cornell Medical College, Nov 19, 2015.
168. “Endoscopic Skull Base Approaches”, 4<sup>th</sup> Annual Barrow Neuro-Oncology Symposium, Phoenix, Arizona, Nov 6, 2015
169. “Cesium 131 brachytherapy for intracranial metastases”, 4<sup>th</sup> Annual Barrow Neuro-Oncology Symposium, Phoenix, Arizona, Nov 7, 2015
170. “Endoscopic transsphenoidal pituitary surgery” 4<sup>th</sup> Annual Symposium on Endoscopic transsphenoidal surgery” Kocaeli University, Kocaeli, Turkey, Oct 20, 2015.
171. “Endoscopic extended transsphenoidal approaches” 4<sup>th</sup> Annual Symposium on Endoscopic Transsphenoidal Surgery” Kocaeli University, Kocaeli, Turkey, Oct 20, 2015.
172. “Minimally invasive advances in neurosurgery” Inaugural One Health Conference: Connecting Human and Veterinary Medicine. A Comparative Approach to Cancer Care. New York, NY Oct 3, 2015.
173. “Surgery for non-hormone producing pituitary adenomas” Practical Course: Keyhole and Endoscopic Cranial Surgery, Congress of Neurosurgeons, New Orleans, LA, Sept 27, 2015.
174. “Endonasal versus Transcranial Approaches: Pros and Cons” Practical Course: Keyhole and Endoscopic Cranial Surgery, Congress of Neurosurgeons, New Orleans, LA, Sept 27, 2015.
175. “Endoscopic approaches to the anterior skull base” Practical Course: Brain Tumor Update, Congress of Neurosurgeons, New Orleans, LA, Sept 26, 2015.
176. “Endoscopic approach to skull base chordomas” Neuro-Oncology Session, XXIII Mexican Neurosurgical Congress, Mazatlan, Mexico, August 3, 2015.
177. “Endoscopic surgery of the skull base: limitations”, Breakfast seminar, XXIII Mexican Neurosurgical Congress, Mazatlan, Mexico, August 4, 2015.
178. “Extended transsphenoidal approach for suprasellar tumors” Plenary Lecture, XXIII Mexican Neurosurgical Congress, Mazatlan, Mexico, August 4, 2015.
179. “Imaging and reimagining the epileptic focus” Initiative of the Brain Committee Meeting, Weill Cornell Medical College, New York, NY, May 26, 2015
180. “Resection with intraoperative brachytherapy with Cesium 0131 for metastases and primary brain tumors”, Advances in Brachytherapy, An International Symposium, Weill Cornell Medical College, New York, NY, May 8-9, 2015
181. “Endoscopic transcribriform versus supraorbital approach to the anterior fossa”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 8-9, 2015.
182. “Endoscopic resection of meningiomas and craniopharyngiomas”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 8-9, 2015.
183. “Endoscopic transclival and transodontoid approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 8-9, 2015.
184. “Extended endonasal endoscopic approaches for invasive and giant pituitary adenomas” Practical Course 016: Practical and Technical Aspects of Transsphenoidal Surgery, AANS Washington, DC, May 3, 2015.

185. “Endoscopic resection of craniopharyngiomas” Open versus Endoscopic Approaches to the Anterior Skull Base, AANS Washington, DC, May 3, 2015.
186. “Intra-cavitary brachytherapy versus stereotactic radiosurgery for resected brain metastases”, Neurosurgical Society of America, Newport Coast, CA, April 13, 2015.
187. “Mid-career training in neuro-endoscopy” Neurosurgical Society of America, Newport Coast, CA, April 13, 2015.
188. “Endoscopic endonasal resection of chordomas and chondrosarcomas” Radiation Oncology Grand Rounds, Weill Cornell Medical College, New York, NY, January 15, 2015.
189. “Endoscopic endonasal resection of chordomas and chondrosarcomas” Skull Base and Intraventricular Neuro-Endoscopy, Emory University School of Medicine, Atlanta Georgia, Dec 11, 2014.
190. “Endoscopic endonasal resection of anterior skull base meningiomas” Skull Base and Intraventricular Neuro-Endoscopy, Emory University School of Medicine, Atlanta Georgia, Dec 11, 2014.
191. “Optical mapping of seizure onset and propagation” 28th Epilepsy Society of Australia Meeting, Melbourne, Australia Nov 7, 2014.
192. “Novel brain stimulation strategies for epilepsy”, 28th Epilepsy Society of Australia Meeting, Melbourne, Australia Nov 7, 2014.
193. “Endoscopic approaches to the anterior skull base” Practical Course: Brain Tumor Update, Congress of Neurosurgeons, Boston, MA October 18, 2014.
194. “Quality of life following endonasal endoscopic craniopharyngioma surgery” European Society of Neurosurgical Societies, Prague, Czech Republic, October 14, 2014.
195. “Endoscopic skull base surgery. Lessons Learned” European Society of Neurosurgical Societies, Prague, Czech Republic, October 13, 2014.
196. “Endoscopic skull base surgery. Lessons learned” Grand Rounds, Columbia-Presbyterian Department of Neurosurgery Oct 9, 2014.
197. “Endoscopic endonasal surgery for Cushing’s Disease” Update on the Management of Pituitary Tumors. Washington University in St. Louis, Sept. 27, 2014.
198. “For George...” George Ojemann Symposium, University of Washington, Seattle, September 26, 2014.
199. “Quality of life after endonasal endoscopic resection of craniopharyngiomas” American Academy of Neurological Surgeons, Santa Rosa Beach, Florida, September 18, 2014.
200. “Endoscopic endonasal approach to the clivus and petrous apex” UCSF Neurosurgery Update 2014, Silverado, Napa CA. August 9, 2014.
201. “Endoscopic endonasal approach to the suprasellar cistern” UCSF Neurosurgery Update 2014, Silverado, Napa CA. August 8, 2014.
202. “Resection cavity volume following cesium-131 intracavitary brachytherapy for brain metastases” Neurosurgical Society of America, New Brunswick, Canada, June 9, 2014.
203. “Endoscopic transcribriform versus supraorbital approach to the anterior fossa”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 30-31, 2014.
204. “Endoscopic resection of meningiomas and craniopharyngiomas”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 30-31, 2014.
205. “Endoscopic transclival and transodontoid approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, May 30-31, 2014.

206. “Cesium-131 brachytherapy for brain metastases”, Hematology/Oncology Grand Rounds, Weill Cornell Medical College, May 28, 2014
207. “Endoscopic approaches to the clivus”, Duke/Methodist Cerebrovascular and Skull Base Conference, The Battle at Pinehurst, May 16, 2014
208. “Closure of skull base defects” 6<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
209. “Complications of endoscopic endonasal skull base surgery” 6<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
210. “Anterior skull base anatomic dissection” 6<sup>th</sup> World Congress for Endoscopic Surgery off the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
211. “Endoscopic management of chondrosarcomas” 6<sup>th</sup> World Congress for Endoscopic Surgery off the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
212. “Long-term outcome for craniopharyngiomas surgery” 6<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 16, 2014.
213. “Endoscopic management of malignant skull base tumors” 6<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 15, 2014.
214. “Extended transsphenoidal approach results” Practical and technical aspects of transsphenoidal surgery, Practical Course, AANS, San Francisco, April 6, 2014.
215. “Endoscopic surgical corridors to the skull base” II Simposio de Oncologia y Base del Cranio, Cartagena, Columbia, March 20, 2014.
216. “Algorithm for endoscopic skull base reconstruction” II Simposio de Oncologia y Base del Cranio, Cartagena, Columbia, March 20, 2014.
217. “Treatment of chordomas with endoscopy” II Simposio de Oncologia y Base del Cranio, Cartagena, Columbia, March 20, 2014.
218. “Treatment of craniopharyngiomas with endoscopy” II Simposio de Oncologia y Base del Cranio, Cartagena, Columbia, March 20, 2014.
219. “Cushings disease” II Simposio de Oncologia y Base del Cranio, Cartagena, Columbia, March 20, 2014.
220. “Endoscopic endonasal sellar and parasellar surgery” Endocrinology grand rounds, University of Maryland, March 10, 2014.
221. “Transcranial and endoscopic microsurgical operative corridors: accessing difficult-to-reach tumors. AANS Operative Grand Rounds, Feb 25, 2014.
222. “The endonasal approach to the odontoid and its impact on early extubation and feeding”, North American Skull Base Society, San Diego, Feb 14, 2014.
223. “Quality of life after endonasal craniopharyngioma surgery” North American Skull Base Society, San Diego, Feb 14, 2014.
224. “Endoscopic approaches to the skull base. Lessons learned over 10 years”, Neurosurgery Grand Rounds, Department of Neurosurgery, Tel-Aviv University, Tel Aviv, Israel, Jan 1, 2014.
225. “Endoscopic approach for meningiomas and craniopharyngiomas” Skull Base and Intraventricular Neuro-Endoscopy Course, Emory University School of Medicine, Atlanta, GA, Dec 5, 2013.
226. “Endoscopic approach for chordomas”, Skull Base and Intraventricular Neuro-Endoscopy Course, Emory University School of Medicine, Atlanta, GA, Dec 5, 2013.
227. “Endoscopic approaches to the clivus” Endoscopic and Microscopic Approaches to the Clivus, Methodist Hospital, Houston, TX, Nov 23, 2013.
228. “Endoscopic pituitary surgery. What is the advantage?” The Pituitary Gland in health and Disease, Weill Cornell Medical College, New York, NY Nov 8, 2013.

229. “When is an endoscopic approach necessary?” Luncheon Seminar, Congress of Neurosurgery, San Francisco, CA, October 22, 2013.
230. “Open versus endoscopic approaches to the skull base” Plenary Lecture, Congress of Neurosurgery, San Francisco, CA, October 21, 2013.
231. “Endoscopic skull base surgery. The road less travelled”, Grand Rounds, Department of Otolaryngology, Weill Cornell Medical College, New York Presbyterian Hospital, October 17, 2013.
232. “Endoscopic approaches to the skull base. Lessons learned over 10 years”, Neurosurgery Grand Rounds, Department of Neurosurgery, Stanford University, Palo Alto, CA, Oct 10, 2013.
233. “Endoscopic resection of tuberculum sella meningiomas”. The 1<sup>st</sup> Dandy Division of Skull Base Surgery Meeting, St. Louis, MO, Oct 4<sup>th</sup>, 2013.
234. “Probing the epileptic network with calcium dyes and multi-contact electrode arrays” American Academy of Neurological Surgery, Newport Beach, CA, Sept 26, 2013.
235. “Endoscopic skull base surgery. Lessons learned”, Plenary Lecture, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 18, 2013.
236. “Surgery for benign brain tumors in eloquent cortex. Management strategies”, Plenary Lecture, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 18, 2013.
237. “Removal of giant pituitary adenomas” Breakfast seminar, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 17, 2013.
238. “Endoscopic transplanum approach to the suprasellar cistern”, Breakfast seminar, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 16, 2013.
239. “Neurovascular coupling in epileptogenesis: a zone or a network”, Plenary Lecture, International league Against Epilepsy Meeting, Montreal, Canada, June 27, 2013
240. “Endoscopic resection of giant adenomas,” Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 14-15, 2013
241. “Endoscopic resection of meningiomas and craniopharyngiomas” Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 14-15, 2013
242. “Endoscopic transclival and transodontoid approach” Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 14-15, 2013
243. “Optical imaging for epilepsy surgery”, Stereotactic and Functional Neurosurgery Section, New Orleans, LA, April 31, 2013.
244. “Skull base surgery in the era of multimodality therapy”, The Future of Skull Base Surgery Symposium, Brain Tumor Session, New Orleans, LA, April 31, 2013.
245. “Endoscopic approach to juxtaseilar and parasellar tumors”, Breakfast Seminar, AANS, New Orleans, LA, April 30, 2013.
246. “Endoscopic surgery for sellar and parasellar tumors” AANS Practical Workshop, Brain Neoplasms Update, New Orleans, LA, April 28, 2013.
247. “Endoscopic transsphenoidal surgery for giant adenomas” AANS Practical Workshop, Transsphenoidal Surgery New Orleans, LA, April 28, 2013.
248. “The endonasal approach to giant pituitary adenomas”, Rhinology IV, Sao Paulo, Brazil April 18, 2013
249. “The endonasal extended suprasellar approach”, Rhinology IV, Sao Paulo, Brazil April 18, 2013
250. “The evolution and future of endonasal endoscopic skull base and brain surgery” Plenary lecture, Rhinology IV, Sao Paulo, Brazil April 18, 2013

251. “Endoscopic endonasal transtuberculum, transplanum approach: Lessons learned in a large series of patients”, Neurosurgical Society of America, Sea Island Georgia, April 8, 2013.
252. “Endoscopic skull base anatomy and approaches”, Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
253. “Endoscopic pituitary surgery”, Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
254. “Endoscopic approaches for meningiomas and craniopharyngiomas”, Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
255. “Endoscopic transpterygoidal approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
256. “Endoscopic transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
257. “Endoscopic transclival and transodontoid approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
258. “Endoscopic skull base surgery: indication and results” Grand Rounds, Department of Neurosurgery, Lenox-Hill Hospital, New York , NY March 5, 2013
259. “Meningiomas. The best quality care is by the endoscopic endonasal approach” North American Skull Base Society Meeting, Miami, Florida, Feb 16, 2013
260. “Endoscopic approaches to sellar and suprasellar tumors” Breakfast seminar, North American Skull Base Society Meeting, Miami, Florida, Feb 16, 2013
261. “Endoscopic endonasal approaches to craniopharyngiomas” North American Skull Base Society Meeting, Miami, Florida, Feb 15, 2013
262. “Surgical corridors. Sellar and suprasellar approaches” Pre-meeting practical course, North American Skull Base Society Meeting, Miami, Florida, Feb 13, 2013
263. “Endonasal surgical anatomy” Pre-meeting practical course, North American Skull Base Society Meeting, Miami, Florida, Feb 13, 2013
264. “Cesium-131 brachytherapy for resected brain metastases” Luncheon Seminar, Society for Neuro-Oncology, Washington, DC, November 17, 2012.
265. “Endoscopic skull base and pituitary surgery” New York Advanced Rhinology and Sinus Surgery 2012. New York, November 10, 2012
266. “Phase I/II trial of post-resection intracavitary brachytherapy for brain metastases” American Academy of Neurosurgery, Cape Cod, MA, October 18, 2012.
267. “Endonasal resection of the odontoid” Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 13, 2012
268. “The transcribriform approach” Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012
269. “Endoscopic resection of meningiomas and craniopharyngiomas” Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012
270. “Endoscopic pituitary surgery” Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012
271. “Anatomy and approaches” Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012
272. “Advantages of endoscopic skull base approaches” Open Skull Base Surgery, When is the Traditional Approach Necessary, Luncheon Seminar, Congress of Neurosurgery, October 10, 2012.



273. "Endoscopic resection of chordomas and chondrosarcomas" Luncheon Seminar, Skull Base Endoscopy. Utility and limitations. Congress of Neurosurgery, Chicago, October 9, 2012.
274. "Endoscopic resection of meningiomas" Practical Course. Masters of Neuroendoscopy. Congress of Neurosurgery, Chicago, Oct 5, 2012.
275. "Epilepsy: Disease process, and new frontiers" BME 411, Cornell University, Ithaca, NY Oct 2, 20012
276. "Endoscopic skull base surgery" 11<sup>th</sup> Annual International Neuro-Oncology Updates, Baltimore, MD, Sept 21, 2012.
277. "Intraoperative CSF leak during pituitary surgery, risk factors and significance" International Society for Pituitary Surgeons, Montreal, Canada, June 23, 2012.
278. "Endoscopic approaches to the anterior skull base" Department of Otolaryngology-Head and Neck Surgery, Montefiore Medical Center, Bronx, NY, June 18, 2012
279. "Endoscopic skull base approaches" University of Neurosurgery Webinar, May22, 2012.
280. "Epilepsy Surgery" Brain and Spine CME Course, Weill Cornell Medical College, New York, NY, May 4, 2012.
281. "Endoscopic skull base surgery" Honored Guest Lecturer, Society for British Neurosurgery, Aberdeen, Scotland, April 18, 2012.
282. "Complications in endoscopic skull base surgery", AANS Breakfast Seminar, Miami, Florida, April 16, 2012.
283. "Endoscopic transsphenoidal surgery for giant adenomas" AANS Practical Workshop, Miami, Florida, April 15, 2012.
284. "Endoscopic craniopharyngioma surgery" 5<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Vienna, Austria, April 1, 2012.
285. "The importance and timing of optic canal decompression in endonasal endoscopic resection of tuberculum sellae and planum sphenoidale meningiomas." 5<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Vienna, Austria, March 30, 2012.
286. "Endoscopic skull base surgery" Grand Rounds, Department of Neurosurgery, Yale-New Haven Medical Center, New Haven, CT, March 28, 2012.
287. "Endoscopic endonasal resection of suprasellar meningiomas and craniopharyngiomas" Honored Guest, 1<sup>st</sup> International Forum on Skull Base Trauma and Minimally Invasive Neurosurgery and 1<sup>st</sup> Workshop on Endoscopic Skull base Surgery and 12th Workshop on latest Neurosurgical Advancements, Neurosurgical Department of Changzheng Hospital, Shanghai, China March 17-18, 2012
288. "Endoscopic endonasal transpterygoid and transclival approach" Honored Guest, 1<sup>st</sup> International Forum on Skull base Trauma and Minimally Invasive Neurosurgery and 1<sup>st</sup> Workshop on Endoscopic Skull base Surgery and 12th Workshop on latest Neurosurgical Advancements, Neurosurgical Department of Changzheng Hospital, Shanghai, China March 17-18, 2012
289. "Endoscopic endonasal odontoid resection" 28th Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Orlando, FL, March 9, 2012.
290. "Endoscopic Skull Base Surgery" Grand Rounds, Department of Neurosurgery, North Shore-LIJ, Long Island, NY, March 6, 2012.
291. "3D Extended Endoscopic Skull Base Approaches" 3D Endoscopy Course, Montefiore Institute for Minimally Invasive Surgery, Montefiore Medical Center, Bronx, NY, March 2, 2012.

292. “Advantages of 3D Endoscopy” 3D Endoscopy Course, Montefiore Institute for Minimally Invasive Surgery, Montefiore Medical Center, Bronx, NY, March 2, 2012.
293. “Endoscopic sellar and suprasellar approaches” North American Skull Base Society, Dissection Course, Las Vegas, NV, Feb 15, 2012.
294. “Endoscopic Skull Base Surgery” 10<sup>th</sup> Annual Masters Course in Skull Base Surgery, University of South Florida, Tampa, FL, Feb 9, 2012.
295. “Incidence and significance of intraoperative CSF leak in endoscopic pituitary surgery using intrathecal fluorescein” 38<sup>th</sup> Richard Lende Neurosurgery Conference January 28, 2012.
296. “Neurosurgery – Choosing a Life in Medicine and Science” Kingswood-Oxford Stroud Science Symposium, West Hartford, CT, January 20, 2012.
297. “Endoscopic endonasal transpterygoid and transclival approaches”, Johns Hopkins 5<sup>th</sup> Annual Skull Base Course, Baltimore, MD, Dec 9, 2011.
298. “Seizure Control in Glioma Surgery”, Brain Tumor and Epilepsy SIG, American Epilepsy Society Meeting, Baltimore, MD, Dec 4, 2011.
299. “Endoscopic pituitary surgery” Geisinger 1<sup>st</sup> Annual Skull Base and Neuro-Oncology Surgery Symposium, Philadelphia, PA, Dec 1, 2011.
300. “Endonasal versus transcranial approaches to the cavernous sinus, suprasellar cistern and clivus – A balanced dialogue” Sunrise Session, Society for Neuro-Oncology, Orange County, CA, Nov. 18, 2011
301. “Endoscopic skull base surgery” Neurosurgery Grand Rounds, St. Barnabas Hospital, West Orange, New Jersey, Nov. 9, 2011.
302. “Endoscopic resection of pituitary tumors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
303. “Endoscopic transthemoidal, transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
304. “Endoscopic approach to the suprasellar cistern”, Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
305. “Endoscopic skull base anatomy and corridors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
306. “Improved quality of life 6 months after endoscopic skull base surgery” Academy of Neurological Surgeons, Phoenix, AZ, Oct 20, 2011.
307. “Endoscopic Resection of Meningiomas” Practical Course. Master of Neuroendoscopy. Congress of Neurosurgery, Washington DC, Oct 1, 2011.
308. “Epilepsy: Disease process, and new frontiers” BME 411, Cornell University, Ithaca, NY Sept 24, 20011
309. “Preictal vascular phenomenon” 5<sup>th</sup> International Seizure Prediction Workshop, Dresden, Germany, Sept 21-23, 2011.
310. “Endoscopic skull base surgery” CNS 3D surgical Anatomy Course, Burr Ridge, IL, August 27, 2011.
311. “Tecnicas de reconstruction en cirugia de la base de craneo”, 21<sup>st</sup> Mexican Neurosurgical Congress, Acapulco, July16-21, 2011. “Minimally invasive neurosurgery”, Video Lunch Con Los Expertos, 21<sup>st</sup> Mexican Neurosurgical Congress, Acapulco, July16-21, 2011.
312. “Aboradaje de tumors de la base del craneo por endoscopia”, 21<sup>st</sup> Mexican Neurosurgical Congress, Acapulco, July16-21, 2011.
313. “Aboradaje endoscopico a los tumors de hipofisis ¿Como lo hago?”, 21<sup>st</sup> Mexican Neurosurgical Congress, Acapulco, July16-21, 2011.

314. “Meningiomas del tuberculo selar. Indicacion para abordaje endoscopico extendido”, 21<sup>st</sup> Mexican Neurosurgical Congress, Acapulco, July 16-21, 2011.
315. “Endoscopic skull base and pituitary Surgery”, Grand Rounds, Department of Neurosurgery, University of Michigan, Ann Arbor, MI, June 29, 2011.
316. “Endoscopic transtentorial, transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
317. “Endoscopic approach to the suprasellar cistern”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
318. “Endoscopic skull base anatomy and corridors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
319. “Endoscopic resection of pituitary tumors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
320. “Neurovascular coupling mechanisms in rats and humans” Visiting Professor, Department of Neurobiology, Barrow Neurological Institute, Phoenix, AZ May 17, 2011.
321. “Endoscopic approach to juxtaseellar and parasellar tumors”, Breakfast Seminar, AANS, Denver, CO, April 13, 2011.
322. “3D Endoscopic Skull Base Surgery” Visionsense Educational Breakfast, AANS Meeting, Denver, CO, April 12, 2011
323. “Pre-ictal and ictal neurometabolic and vascular coupling” Neurosurgical Society of America, Kona, Hawaii, March 28, 2011.
324. “Endoscopic Skull Base Surgery” Grand Rounds, Mt. Sinai Department of Neurosurgery, New York, NY, March 23, 2011.
325. “Endoscopic Skull Base Surgery: A Journey in Innovation” Distinguished Skull Base Lectureship, Penn Rhinology and Skull Base Course, University of Pennsylvania, Philadelphia, PA, March 10, 2011.
326. “3D Endoscopy” Penn Rhinology and Skull Base Course, University of Pennsylvania, Philadelphia, PA, March 10, 2011.
327. “Craniopharyngioma – Endoscopic approaches” North American Skull “Complications of Endoscopic Skull Base Surgery” Penn Rhinology and Skull Base Course, University of Pennsylvania, Philadelphia, PA, March 10, 2011.
328. “Craniopharyngioma – Endoscopic approaches” North American Skull Base Society, Special Seminar, Scottsdale, AZ, Feb 15, 2011.
329. “Endoscopic sellar and suprasellar approaches” North American Skull Base Society, Dissection Course, Scottsdale, AZ, Feb 15, 2011.
330. “Neurovascular coupling in epilepsy in rats and humans” Bombay Neurological Association, Mumbai, India, Feb 2, 2011.
331. “Skull base and pituitary anatomy”, Nasal, Paranasal Sinus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
332. “Endoscopic resection of pituitary tumors”, Nasal, Paranasal Sinus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
333. “Endoscopic transplanum, transtuberulum approach”, Nasal, Paranasal Sinus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
334. “3D endoscopic skull base surgery”, Nasal, Paranasal Sinus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
335. “Endoscopic transtentorial, transcribriform approach”, Nasal, Paranasal Sinus and Anterior Skull base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.

336. “Endoscopic transclival, transodontoid approach”, Nasal, Paranasal Sinus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
337. “Complications of endoscopic skull base surgery”, Nasal, Paranasal Sinus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
338. “Neurovascular coupling in epilepsy in rats and humans” Neurology Grand Rounds, Weill Cornell Medical College, New York, NY, Dec 8, 2010.
339. “Endoscopic approach to the anterior cranial fossa” Johns Hopkins 4<sup>th</sup> Annual Skull Base Course, Baltimore, MD, Dec 3, 2010.
340. “Endoscopic approach to the pterygopalatine fossa” Johns Hopkins 4<sup>th</sup> Annual Skull Base Course, Baltimore, MD, Dec 3, 2010.
341. “Endoscopic transthemoidal, transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Nov 6, 2010.
342. “Endoscopic approach to the suprasellar cistern”, Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Nov 5, 2010.
343. “Endoscopic skull base anatomy and corridors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Nov 5, 2010.
344. “Neurovascular coupling in epilepsy in rats and humans” Neurology Grand Rounds, University of Rochester, Rochester, NY, Oct 29, 2010.
345. “Endoscopic endonasal transpterygoidal approach” Endoscopic Skull Base Surgery Luncheon Seminar, CNS, San Francisco, CA, Oct 18, 2010.
346. “Endoscopic resection of chordomas and juvenile angiofibromas” Intracranial Endoscopy Practical Course, CNS, San Francisco, CA, Oct 17, 2010.
347. “Volumetric measurement predicts extent of resection and complications in giant pituitary adenomas” International Society of Pituitary Surgeons. Sonoma, CA, Oct 15, 2010.
348. “Epilepsy, pathophysiology, surgical management and new frontiers” BME 411, Cornell University, Ithaca, NY, Oct 6, 2010.
349. “Optical imaging of preictal haemodynamic changes” Preictal Phenomena. Expert Workshop. Epilepsy Research UK. St. Catherine’s College, Oxford, UK Sept 23-24, 2010
350. “Neurovascular coupling in rats and humans,” Grand Rounds, Departments of Neurosurgery and Neurology, MGH, Boston, MA Sept 16, 2010.
351. “Endoscopic approach to the suprasellar cistern and anterior fossa“, Endoscopic Skull Base and Intraventricular Surgery, CME Course, Emory University, Atlanta, GA, July 31, 2010.
352. “Endoscopic transthemoidal, transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2011.
353. “Endoscopic approach to the suprasellar cistern”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2010.
354. “Endoscopic skull base anatomy and corridors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2010.
355. “Endoscopic resection of pituitary tumors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2010.
356. Endoscopic skull base surgery. A neurosurgeon’s perspective” Endoscopic Sinus Surgery, CME Course, Weill Cornell Medical College, New York, NY June 3, 2010.
357. “Does extent of Resection make a difference in gliomas?” The Art and Science of Glioma Therapy: Emerging Concepts in Biology and Treatment. CME Course, Weill Cornell Medical College, New York, NY, May 13, 2010.

358. “Diagnosis and management of brain tumors, Brain and Spine 2010 CME Course, Weill Cornell Medical College, New York, NY, May 7, 2010.
359. “Endoscopic resection of craniopharyngiomas” Breakfast Seminar. AANS, Philadelphia, PA, May 3, 2010.
360. “Endoscopic approaches to the skull base” Practical Course. AANS, Philadelphia, PA, May1, 2010.
361. “3D endoscopy: flattening the learning curve” Plenary Session. 4<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine. Pittsburgh, PA, April 28, 2010.
362. “Endoscopic resection of craniopharyngiomas. Is craniotomy obsolete?” Miniseminar. 4<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine. Pittsburgh, PA, April 27, 2010.
363. “Endoscopic approaches to the anterior skull base” Luncheon Seminar. 4<sup>th</sup> World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine. Pittsburgh, PA, April 27, 2010.
364. “Endoscopic skull base surgery: pros and cons” Symposium, NSA, Pebble Beach, CA, April 14, 2010.
365. “Optical imaging of epilepsy – ready for prime time?” Investigator’s Workshop, AES, Boston, MA Dec 6, 2009.
366. “Optical imaging of neurovascular coupling in epilepsy” Engineering and Epilepsy SIG, AES, Boston, MA, Dec 5, 2009.
367. “Endoscopic skull base surgery” Neurology Grand Rounds, Weill Cornell Medical College, New York, NY, Nov 29, 2009
368. “Epilepsy, pathophysiology, surgical management and new frontiers” BME 411, Cornell University, Ithaca, NY, Nov. 10, 2009.
369. “Epilepsy Surgery” Columbia Epilepsy Center Patient Day, New York, NY, Nov 7, 2009
370. “Improving outcomes and control with surgical interventions” Creative Management of Children with Epilepsy, CME Course, Weill Cornell Medical College, New York, NY, Nov. 6, 2009.
371. “Advantages of endoscopy in pituitary surgery” Lunch Seminar, CNS, New Orleans, LA, Oct 27, 2009.
372. “Endoscopic management of benign skull base tumors” Sunrise session, Society for Neuro-Oncology, New Orleans, LA, Oct 23, 2009.
373. “Endoscopic skull base surgery”, Neurosurgery Grand Rounds, Weill Cornell Medical College, New York, NY. Oct 19, 2009.
374. “Endoscopic surgery for chordomas” in The Multidisciplinary management of Skull Base Chordomas and Chondrosarcomas, NASBS, New Orleans, LA, Oct. 18, 2009.
375. “3D endoscopic endonasal surgery – Does stereoscopic vision make a difference?” in New Instrumentation and Technologies in Endoscopic Skull Base Surgery, NASBS, New Orleans, LA, Oct. 16, 2009.
376. “Endoscopic Approach to the Suprasellar Cistern?” in Endoscopic Endonasal Skull Base Dissection Course, NASBS, New Orleans, LA, Oct. 14, 2009.
377. “Epilepsy: Disease process, and new frontiers” BME 411, Cornell University, Ithaca, NY Sept 24, 2009
378. “Endoscopic pituitary and parasellar surgery: advantages of the minimally invasive endonasal approach” Endocrinology Grand Rounds, Weill Cornell Medical College, New York, Sept 23, 2009
379. “The role of skull base endoscopy: replaces, complements or antagonizes traditional skull base surgery. A round table” WFNS, Boston, MA, Sept. 1, 2009.

380. “Endoscopic endonasal resection of clival chordomas” NSA meeting, Hot Springs, VA, June 8, 2009.
381. “Endoscopic approach to the suprasellar cistern and anterior fossa“, Endoscopic Skull Base and Intraventricular Surgery, CME Course, Emory University, Atlanta, GA, July 31, 2010.
382. “Endoscopic transthemoidal, transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.
383. “Endoscopic approach to the suprasellar cistern”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.
384. “Endoscopic skull base anatomy and corridors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.
385. “Endoscopic resection of pituitary tumors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.
386. “Brain Tumors: What You Need To Know” Weill Cornell Executive Council, Weill Cornell Medical College, New York, June 3, 2009
387. “Surgical treatment of brain tumors” Brain and Spine in 2009, CME Course, Weill Cornell Medical College, New York, May 15, 2009
388. “Epilepsy surgery – an update” Brain and Spine in 2009, CME Course, Weill Cornell Medical College, New York, May 15, 2009
389. “Endoscopic skull base approaches” Intracranial endoscopy, techniques, outcomes and complications: practical course, AANS, San Diego, May 3, 2009.
390. “Endoscopic approaches to the anterior skull base” Breakfast Seminar, Open versus Endoscopic Approaches. AANS, San Diego, May 5, 2009.
391. “Endoscopic approaches to juxtaseellar and parasellar tumors”, Breakfast seminar, AANS, San Diego, May 4, 2009.
392. “Minimally Invasive Brain Surgery” Lecture to board of Trustees, NYPH, Weill Cornell Medical College, April 22, 2009.
393. “Endoscopic suprasellar approaches for skull base lesions” Mini Seminar Endoscopic Surgery of the Skull Base, Rhinology 2009, Philadelphia, PA, April 19, 2009.
394. “Endoscopic resection of clival chordomas” Lende Meeting, Salt Lake City, Utah, Feb 1, 2009.
395. “Optical imaging of perfusion and oximetry during epilepsy: lessons learned and relevance to BOLD fMRI”, Neuroimaging SIG, American Epilepsy Society, Seattle, WA Dec 7, 2008.
396. “Optical imaging of perfusion and oximetry during epilepsy: lessons learned and relevance to BOLD fMRI”, Investigators Workshop, American Epilepsy Society, Seattle, WA Dec 7, 2008.
397. “Imaging the onset and spread of neocortical epilepsy”, New Frontiers in Neurological Surgery, Weill Cornell Medical College, Dec. 5, 2008.
398. “Expanded endonasal skull base surgery” Nassau Nerosurgical Society, Long Island Marriott, Dec 2, 2008.
399. “Cell phones and brain tumors: session moderator” Patient Awareness Day, The Brain Tumor Foundation, NYU Medical School, Nov 16, 2008.
400. “Endoscopic endonasal skull base surgery – A neurosurgeon’s perspective” Advanced Endoscopic Sinus Surgery, Weill Cornell Medical College, New York, NY Nov 14, 2008.
401. “Building a community of collaborators: moving your research to the next level”, Congress of Neurosurgery, Orlando, FL, Sept 20, 2008.

402. "Epilepsy: Disease process, and new frontiers" BME 411, Cornell University, Ithaca, NY Sept 26, 2008
403. "Endoscopic skull base approaches" North American Skull Base Society Practical Course, Vancouver, Canada, Sept 9, 2008.
404. "Endoscopic approach to the suprasellar cistern and anterior fossa", Endoscopic Skull Base and Intraventricular Surgery, CME Course, Emory University, Atlanta, GA, July 31, 2010.
405. "Endoscopic transtentorial, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
406. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
407. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
408. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
409. "Endoscopic skull base surgery approaches" Neurosurgical Society of America, Whistler, British Columbia, Canada June 4, 2008.
410. "How to manage complications of transnasal skull base surgery" Neuroendoscopy 2008, Sao Paulo, Brazil, May 22-24, 2008.
411. "Transnasal endoscopic approach to the odontoid. Early experience" Neuroendoscopy 2008, Sao Paulo, Brazil, May 22-24, 2008.
412. "Transnasal resection of skull base meningiomas" Neuroendoscopy 2008, Sao Paulo, Brazil, May 22-24, 2008.
413. "Transnasal approaches to the skull base and brain: Anterior skull base transplanum and transtuberculum" Neuroendoscopy 2008, Sao Paulo, Brazil, May 22-24, 2008.
414. "Endoscopic skull base surgery" Grand Rounds, Baylor College of Medicine, Houston, TX, May 9, 2008.
415. "Minimally invasive intracranial neurosurgery" Houston Neurological Society, 19<sup>th</sup> Annual George Ehni Lectureship Houston, TX, May 9, 2008.
416. "Endoscopic skull base approaches" Intracranial endoscopy, techniques, outcomes and complications: practical course, AANS, Chicago, April 26, 2008
417. "Endoscopic approaches to juxtaseilar and parasellar tumors", Breakfast seminar, AANS, Chicago, April 26, 2008
418. "3D stereoscopic pituitary surgery", Joint Section of Tumors Section Meeting, AANS, Chicago, April 26, 2008
419. "Refining brain surgery: laser transections to control epilepsy" The 90<sup>th</sup> Annual Cornell Silicon Valley Presidential Event, Palo Alto, CA April 8, 2008
420. "Neurovascular coupling in epilepsy", Visiting Professor, Resident Teaching Conference, Department of Neurosurgery, UCLA, LA, CA, March 21, 2008.
421. "Endoscopic skull base and pituitary surgery" Visiting Professor, Grand Rounds, Department of Neurosurgery, UCLA, LA, CA, March 21, 2008
422. "The role of surgery in the treatment of gliomas – Does it make a difference?" Oncology Summit: From Discovery to Delivery, Washington, DC March 7, 2008.
423. "Endoscopic skull base surgery" Advanced Endoscopic Sinus Surgery, Weill Cornell Medical College, New York, NY Feb 15-16, 2008.
424. "Two-photon laser transections for neocortical epilepsy" University Council Administrative Board Meeting, Cornell Club, New York, NY February 7, 2008.

425. “Neurovascular coupling during epileptiform events in rats and humans” Richard Lende Neurosurgery Conference, Salt Lake City, Utah, February 2, 2008.
426. “Epilepsy Surgery” in Epilepsy Update, Weill Cornell Medical College, New York, NY October 27, 2007.
427. “Epilepsy: Disease process, and new frontiers” BME 411, Cornell University, Ithaca, NY Sept 24, 2007
428. “Optical Imaging” in Advances in Epilepsy Surgery Symposium, Congress of Neurosurgery, San Diego, CA, Sept. 19, 2007
429. “Endoscopic transtentorial, transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
430. “Endoscopic approach to the suprasellar cistern”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
431. “Endoscopic skull base anatomy and corridors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
432. “Endoscopic resection of pituitary tumors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
433. “Minimally Invasive Neurosurgery” Brain Tumors: Confronting the Challenge Together. Weill Cornell Medical College, New York, NY, June 16, 2007.
434. “Endoscopic Skull Base Surgery: Classification of operative approaches and outcomes”, NSA Meeting, Kohler, WI, June 5, 2007.
435. “Endoscopic Skull Base Approaches”, NASBS, Chicago May 24-27, 2007.
436. “Endoscopic endonasal transtentorial transcribriform transfovea ethmoidalis approach to the anterior skull base and anterior cranial fossa”. NASBS, Chicago May 24-27, 2007.
437. “The “gasket-seal” watertight closure in endoscopic endonasal skull base surgery”. NASBS, Chicago May 24-27, 2007.
438. “Endoscopic, transtentorial, transcribriform, transfovea ethmoidalis approach to the anterior fossa”, Neuroendoscopy 2007, Versaille, Paris, May 9, 2007.
439. “The “gasket-seal” closure of the anterior skull base”, Neuroendoscopy 2007, Versaille, Paris, May 9, 2007.
440. “Endoscopic resection of pituitary and parasellar tumors” Endocrinology Grand Rounds, Columbia-Presbyterian Medical Center, New York, NY, Mar. 9, 2007.
441. “Endoscopic, transtentorial, transcribriform, transfovea ethmoidalis approach to the anterior fossa”, The Lende Meeting, SLC, Utah, Feb 3, 2007.
442. “Frequency dependent hemodynamic responses to direct bipolar cortical stimulation”, The American Academy of Neurological Surgery, Greensboro, GA, Oct, 19, 2006.
443. “Late seizures in patients initially seizure-free after epilepsy surgery”, Congress of Neurosurgery, Chicago, IL, Oct. 9, 2006.
444. “Endoscopic, endonasal extended transplanum, transtuberculum approach for resection of suprasellar lesions”, Congress of Neurosurgery, Chicago, IL, Oct. 9, 2006.
445. “Endoscopic resection of cranial base squamous cell carcinoma and nasopharyngeal carcinoma”, Special Course, Endoscopic Approaches to Cranial Base Tumors, Congress of Neurosurgery, Chicago, IL, Oct. 9, 2006.
446. “Endoscopic Skull Base Surgery”, GE Healthcare Conference, The Latest Advances in Neurosurgery, Congress of Neurosurgery, Chicago, IL, Oct. 9, 2006.
447. “Endoscopic transtentorial, transcribriform approach”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.



448. “Endoscopic approach to the suprasellar cistern”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.
449. “Endoscopic skull base anatomy and corridors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.
450. “Endoscopic resection of pituitary tumors”, Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.
451. “Endoscopic transtuberculum, transplanum approach” 6<sup>th</sup> International Hands-on Workshop, Endoscopic Endonasal Skull Base Surgery, Naples, Italy, May 22, 2006.
452. “Endonasal, endoscopic transtuberculum, transplanum approach to the suprasellar cistern” Lende Meeting, Salt Lake City, Utah, Feb 8, 2006.
453. “Surgical treatment of epilepsy” Advances in Epilepsy, New York Methodist Hospital, Brooklyn, NY Feb. 3, 2006.
454. “Optical imaging of neuronal activity, perfusion and oximetry during epilepsy” Graduate Seminar in Neuroscience, Weill Auditorium, Weill Cornell Medical College, New York, NY Jan. 12, 2006.
455. “Endoscopic skull base surgery” in New Advances in Neurosurgery, Congress of Neurosurgery, Boston, MA Oct. 10, 2005.
456. “Optical mapping of voltage, perfusion and oximetry during epilepsy – insights into neurovascular coupling”, Neurology Grand Rounds, Albert Einstein College of Medicine, Sept. 16, 2005.
457. “Endoscopic parasellar surgery and intraoperative MRI”, Advanced Endoscopic Skull Base Surgery, Weill Cornell Medical College, May 13, 2005.
458. “Endoscopic resection of craniopharyngiomas and Rathke’s cleft cysts”, Advanced Endoscopic Skull Base Surgery, Weill Cornell Medical College, May 13, 2005.
459. “Endoscopic Transnasal resection of anterior skull base meningiomas” Advanced Endoscopic Skull Base Surgery, Weill Cornell Medical College, May 13, 2005.
460. “Endoscopic pituitary surgery in an intraoperative MRI,” North American Skull Base Society, Toronto, Canada, April 9, 2005.
461. “New horizons in endoscopic skull base surgery,” North American Skull Base Society, Toronto, Canada, April 7, 2005.
462. “Optical imaging of neocortical epilepsy”, New York State Neurosurgical Society, Naples, Florida, Feb. 25-27, 2005.
463. “Minimally invasive image-guided endoscopic skull base and pituitary surgery,” New York State Neurosurgical Society, Naples, Florida, Feb. 25-27, 2005.
464. “Optical imaging of neocortical epilepsy” NYU Epilepsy Research Conference, Department of Neurology, NYU Medical Center, February 16, 2005.
465. “Combined endoscopic pituitary surgery with intraoperative MRI”, Richard Lende Neurosurgery Conference, January 30, 2005.
466. “Endoscopic, image-guided pituitary and skull base surgery” Grand Rounds, Department of Neurosurgery, NYU Medical Center, January 28, 2005.
467. “Image-Guided Brain Tumor Surgery” Grand Rounds, Department of Rehabilitation Medicine, Weill Cornell Medical College, January 4, 2005.
468. “Minimally invasive skull base and pituitary surgery” Grand Rounds, Department of Neurology and Neuroscience, Weill Cornell Medical College, Nov 4, 2004.
469. “New Developments in Brain Mapping” Plenary Session, Congress of Neurological Surgeons, San Francisco, CA, Oct 21, 2004

470. "Image-guided central nervous system tumor surgery" in Brain Tumors: Advances in Diagnosis and Treatment. A Comprehensive Review, New York Presbyterian Hospital, New York, October 8, 2004
471. "Surgical treatment of primary brain tumors" New York Roentgen Society, Rockefeller University, New York, N.Y. April 14, 2004.
472. "Image-guided neurosurgery. Intraoperative MRI and endonasal endoscopic approaches in the treatment of pituitary tumors", Grand Rounds, Department of Endocrinology, Memorial-Sloan Kettering Cancer Center-Weill Cornell Medical College, March 10, 2004.
473. "Image-guided neurosurgery. Intraoperative MRI and endonasal endoscopic approaches in the treatment of pituitary tumors", Grand Rounds, Department of Otolaryngology, Weill Cornell Medical College, March 4, 2004.
474. "The surgical treatment of epilepsy" Salzburg Weill Cornell Seminar, Schloss Leopoldskron, Salzburg, Austria, March 2, 2004.
475. "Late failure after initially successful epilepsy surgery." Investigator's Workshop, American Epilepsy Society, Boston, December 9, 2003
476. "Pediatric epilepsy surgery." Grand Rounds, Department of Pediatrics, Weill Cornell Medical College, Uris Auditorium, December 2, 2003.
477. "Optical imaging of epileptiform events in an acute rat model." Neurosurgical Society of America, Sunriver OR, 2003
478. "Intrinsic signal imaging of focal seizures in rat neocortex." Pattern Formation in Physics and Biology, Kavli Institute for Theoretical Physics, Santa Barbara, August 19, 2003
479. "In vivo optical imaging of neocortical epilepsy" Intrinsic Optical Signal in the Brain, Symposium at the American Physical Society Meeting, March 7, 2003.
480. "Optical imaging of epileptiform events in an acute in vivo model." New York Neurosurgical Society, New York, NY, 2003.
481. "Epilepsy surgery-is radiosurgery a viable option?" New Avenues for Treating Brain Disease. Thinking Outside the Box. Uris Auditorium, Weill Cornell Medical Center, February 22, 2003.
482. "Brain mapping in the treatment of brain tumors and epilepsy" Brain Interest Group, Weill Medical College, January 24, 2003.
483. "Recent advances in the surgical treatment of epilepsy." Epilepsy Conference-"Helping people with epilepsy: combining compassion and expertise". Weill Cornell Comprehensive Epilepsy Center. November 9, 2002.
484. "Surgery for epilepsy" Fourteenth Annual Long Island Regional Conference, Epilepsy Foundation of Long Island, Melville, NY. November 7, 2002
485. "Intraoperative brain mapping in the neurosurgical treatment of brain tumors and epilepsy." The Goldenberg Lectureship, St. Francis Hospital, West Hartford, CT, November 6, 2002.
486. "Optical imaging of functional architecture and epilepsy – from the laboratory to the operating room" Graduate Program in Neuroscience, Weill Cornell Medical College, New York, NY. September 5, 2002
487. "Frameless stereotactic placement of depth electrodes for epilepsy using the StealthStation Surgical Navigation system." American Academy of Neurological Surgery, Phoenix, AZ 2002.
488. "Optical imaging of functional architecture and epilepsy – from the laboratory to the operating room" Grand Rounds, Department of Neurological Surgery, Mt. Sinai School of Medicine, New York, NY 2002.

489. "In vivo optical imaging of neocortical epilepsy" Lester Wolfe Workshop in Laser Biomedicine, Massachusetts General Hospital, Boston, MA 2002.
490. "Optical imaging of functional architecture and epilepsy – from the laboratory to the operating room." Deans Hour, Weill Cornell Medical College, Uris Auditorium. New York, NY 2002.
491. "Frameless stereotactic placement of depth electrodes for epilepsy using the StealthStation Surgical Navigation system". Society for University Neurosurgeons, Chicago, IL 2002.
492. "Brain mapping in the treatment of brain tumors and epilepsy." Neuroscience Grand Rounds, Winthrop Hospital, Mineola, NY February 12, 2002.
493. "Recent advances in the surgical treatment of medically intractable epilepsy." Caring for People with Epilepsy: Treatment Updates and Special Concerns. New York Weill Cornell Medical Center. New York, NY January 24, 2002.
494. "In vivo optical imaging of neocortical epilepsy." Investigators Workshop "Recording from Large Neural Networks - What can we Learn from Novel Techniques?" American Epilepsy Society, Philadelphia, PA December 16, 2001
495. "Intraoperative MRI to increase the extent of resection in the treatment of brain tumors." Clinical. Neuroscience: Update for the New Millennium. A National Seminar, Marriott Hotel, New York, NY December 14, 2001
496. "Cortical mapping." Neuroscience: Update for the New Millennium. A National Seminar, Marriott Hotel, New York, NY December 14, 2001
497. "Intraoperative brain mapping in the treatment of brain tumors and epilepsy." Grand Rounds, Department of Neurology. New York Hospital-Queens. Flushing, NY, November 13, 2001.
498. "New advances in the surgical treatment of epilepsy." Epilepsy Conference-"Helping people with epilepsy: combining compassion and expertise". Weill Cornell Comprehensive Epilepsy Center. New York, NY. November 1, 2001.
499. "New advances in the treatment of pituitary adenomas." Grand Rounds, Department of Endocrinology, Weill Cornell Medical College, New York Presbyterian Hospital, Memorial-Sloan Kettering Cancer Center. October 17, 2001.
500. "Intraoperative brain mapping." Grand Rounds, Department of Neurology. Weill Cornell Medical College, New York Presbyterian Hospital. October 3, 2001
501. "The relationship between cortical architecture and epilepsy revealed with *in vivo* optical recording of intrinsic signals." Laboratory of J. Victor, M.D., Ph.D., Professor, Neurology and Neuroscience, Weill Medical College of Cornell University, New York, N.Y. September 10, 2001
502. "The relationship between cortical architecture and epilepsy revealed with *in vivo* optical recording of intrinsic signals." Laboratory of A. Grinvald, Ph.D., Director, The Dominic Brain Research Institute, The Grodetsky Center for Research in Higher Brain Functions, The Arison Human Brain Imaging Laboratory, The Weitzmann Institute for Science, Rehovot, Israel, August 30, 2001
503. "The role of re-operation for recurrent seizures after epilepsy surgery". Lende Meeting, Salt Lake City, UT, 2001
504. "Optical imaging of neocortical epilepsy." Laboratory of E. Kaplan Ph.D., Department of Ophthalmology, Mt. Sinai School of Medicine, New York, N.Y. June 14, 2001
505. "Endoscopic third ventriculostomy in pediatric patients." Department of Pediatrics, Jersey City Medical Center. November 4, 2000
506. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Radiology, University of Medicine and Dentistry in New Jersey. October 17, 2000

507. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Neurosurgery, University of Medicine and Dentistry in New Jersey. October 17, 2000
508. "Epilepsy surgery." Department of Surgery, Jersey City Medical Center New Jersey. October 4, 2000
509. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Neurosurgery, University of Medicine and Dentistry in New Jersey. April 4, 2000
510. "In vivo optical imaging of neocortical epilepsy." Department of Neurobiology, Yale University, New Haven, CT. March 16, 2000
511. "In vivo optical imaging of neocortical epilepsy and surround inhibition." The Academy of Neurological Surgeons, Colorado Springs, CO, 2000.
512. "In vivo optical imaging of neocortical epilepsy." Epilepsy Conference, Yale University, New Haven, CT. February 23, 2000.
513. "In vivo optical imaging of neocortical epilepsy." The Congress of Neurological Surgeons, San Antonio, TX 2000.
514. "In vivo optical imaging of neocortical epilepsy." 3<sup>rd</sup> Pan Pacific Neurosurgery Conference, Big Island, Hawaii, 2000.
515. "In vivo optical imaging of neocortical epilepsy." Department of Neurosurgery, SUNY Downstate. November 23, 1999
516. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Intraoperative Imaging Group, Neurochirurgische Klinik der Universität München, Klinikum Großhadern, Munich, Germany. November 21, 1999
517. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Neurophysiology, Max-Planck Institut für Neurobiologie, Munich, Germany. October 16, 1999
518. "The organization of language in the human brain." Departments of Neurology and Neurosurgery, Leahy Clinic, MA. March 23, 1999
519. "Spontaneous neuronal activity in layer I of the developing neocortex." Department of Neurosurgery, New York Medical College, Valhalla, NY. January 8, 1999.
520. "The association between intracranial plasma cell neoplasms and multiple myeloma. Predictive significance of CD56, CD31, MIB-1, histology and tumor location." The Congress of Neurological Surgeons, Boston, MA 1999.
521. "The organization of language in the epileptic brain." Epilepsy Conference, Columbia University, New York, NY. November 15, 1998.
522. "Ventricular volume following third ventriculostomy." The Congress of Neurological Surgeons, Seattle, WA 1998.
523. "Networks of coactive neurons in developing layer I." The New York Neurosurgical Society, New York, N.Y. 1998.
524. "Stereotactic, endoscopic third ventriculostomy in the treatment of non-communicating hydrocephalus". Department of Pediatrics, New York Presbyterian Hospital, New York, NY. September 27, 1998.
525. "Stimulation mapping of Wernicke's area: location, variability and overlap between naming, reading and arrest of speech". American Epilepsy Society, Boston, MA 1997.
526. "Spontaneous neuronal activity in layer I of the developing neocortex." Department of Neurosurgery, The Neurological Institute of New York, NY. May 12, 1998.
527. "Cajal-Retzius cells and the role of spontaneous layer I activity in the developing neocortex". The Congress of Neurological Surgeons, New Orleans, LA 1997.
528. "Preoperative predictors of anterior temporal language areas." The Congress of Neurological Surgeons, New Orleans, LA 1997.

529. "The organization of language in the epileptic brain." Department of Neurosurgery, The Neurological Institute of New York, NY. July 7, 1997.
530. "Cajal-Retzius cells and the role of spontaneous layer I activity in the developing neocortex." The American Academy of Neurological Surgeons, Banff, Canada 1997.
531. "Single unit recording from human temporal lobe during naming, reading and line-matching." Department of Biology, Columbia University. New York, NY. March 3, 1997.
532. "Stereotactic, endoscopic third ventriculostomy in the treatment of non-communicating hydrocephalus." Department of Neurosurgery, The Neurological Institute of New York, NY. May 26, 1996.
533. "Third ventriculostomy: clinical and radiographic follow-up in 27 patients." Joint International Congress on Minimally Invasive Techniques in Neurosurgery and Otolaryngology, Pittsburgh, PA 1995.
534. "Spontaneous neuronal activity in layer I of the developing neocortex." Department of Neurosurgery, The Neurological Institute of New York, NY. April 8, 1995.
535. "Reading errors during right hemisphere injection of sodium amytal." Congress of the European Association of Neurological Surgeons, Berlin, Germany 1995.
536. "Perimesencephalic nonaneurysmal subarachnoid hemorrhage." Department of Neurosurgery, The Neurological Institute of New York, NY. May 15, 1994.
537. "Single unit recording from human temporal lobe during naming, reading and line-matching" Department of Neurosurgery, University of Washington, Seattle, WA. February 10, 1993



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