

CURRICULUM VITAE

Theodore H. Schwartz, M.D., F.A.C.S. (h-index: 75)

Date of CV Preparation: August 19, 2021

A. <u>GENERAL INFORMATION</u>

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 68th Street STARR-651 – Box 99 New York, NY 10021

Office telephone: 212-746-5620

Office fax: 212-746-8947

Home address: Upon request

Home telephone: Upon request

Cell phone: Upon request

Beeper: 212-746-6700 #10098

e-mail: <u>schwarh@med.cornell.edu</u>

Country of Citizenship: USA

Optional information:

Birth date: Upon request

Birth place: New York, New York

Social Security Number: Upon request

Marital Status: Married

Children: 4

B. <u>EDUCATIONAL BACKGROUND</u>

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	Cold Spring Harbor	1996
in the Nervous System		
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 2000-01

UMDNJ-NJ Med School, Newark, NJ

Adjunct Associate Research Scientist in Biology 2000-02

Columbia University, NYC

Assistant Professor of Neurosurgery

2001-05

Weill Med College of Cornell U., NY

Adjunct Assistant Professor of Neurosurgery

2002-05

Columbia U. Coll. of Phys. And Surgeons

Assistant Professor of Neurological Surgery in Neurology and Neuroscience 2004-05

Weill Med College of Cornell U., NY

Associate Professor of Neurosurgery

2005-09

Weill Cornell Med College of Cornell U., NY

Associate Professor of Neurological Surgery in Neurology and Neuroscience 2005-09

Weill Cornell Med College of Cornell U., NY

Associate Professor of Neurological Surgery in Otorhinolaryngology 2008-09

Weill Cornell Med College of Cornell U., NY

Professor of Neurosurgery 2009-present

Weill Cornell Med College of Cornell U., NY

Professor of Neurological Surgery in Otorhinolaryngology 2009-present

Weill Cornell Med College of Cornell U., NY

Professor of Neurological Surgery in Neuroscience 2009-present

Weill Cornell Med College of Cornell U., NY

David and Ursel Barnes Endowed Professor of Minimally Invasive Neurosurgery 2014-present

Weill Cornell Med College of Cornell U., NY

Vice-Chairman of Clinical Research, Department of Neurosurgery 2019-present

Weill Cornell Med College of Cornell U., NY

Hospital positions

Chief, Division of Neurosurgery

Jersey City Med Ctr, Jersey City, NJ

2000-01

Chief, Division of Neurosurgery

2001-02

2001-05

St. Barnabas Hospital, Bronx, NY

Assistant Attending Neurosurgeon

New York-Presbyterian Hospital, NY

NYP Hospital Consultant

2002-2015

Hospital for Special Surgery, NY

Orthopaedic Surgery/Neurosurgery

Associate Attending Neurosurgeon

New York-Presbyterian Hospital, NY New York-Presbyterian Hospital, NY

2005-09 2009-present

Attending Neurosurgeon Attending Neurosurgeon Attending Neurosurgeon

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

Employment

Consultant Neurosurgeon

The Brooklyn Hospital, Brooklyn, NY

2001-07

Consultant Neurosurgeon

St. Barnabas Nursing Facility, Bronx, NY

2001-07

Consultant Neurosurgeon

2002-04

Westchester Square Med Ctr, Bronx, NY

Consultant Neurosurgeon

2002-07

New York Hospital Queens, Queens, NY

Consultant Neurosurgeon

2006-08

Lennox Hill Hospital, NY

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

D. LICENSURE, BOARD CERTIFICATION, MALPRACTICE

Licensure

NYS Issued 6/30/00 218102 **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. <u>PROFESSIONAL MEMBERSHIPS</u>

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

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,	1997
Honorable Mention	

Junior Investigator Award, American Epilepsy Society	199	97
Epilepsy Foundation Research/Clinical Training Fellowship	1999	
Alexander Von Humboldt Fellowship	1999	
William P. Van Wagenan Fellowship	200	00
German Academic Exchange (DAAD) Award	200	00
Academy Award, The American Academy of Neurological Surgeons, Honor. I	Mention 200	00
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-	80
NIH Study Section (NCRR GCRC Site visit)	200	05
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	200	06
Synthes Skull Base Award, CNS	200	06
NINDS NSD-C Permanent Member	2006-20	10
Univ. of Pitt. Neurosurgery Chairman Interview	200	07
NIBIB Study Section 06-003 RFA	200	07
NINDS, study section ZNS1 SRB-B	200	80
Visiting Professor, UCLA	200	80
George Ehni Lectureship, Visiting Professor, Baylor School of Medicine	200	80
Faculty of 1000 Biology, PNAS paper	200	80
New York Superdoctors	2008-prese	nt
Faculty of 1000 Medicine, Epilepsia Paper	200	80
Visiting Professor, Stanford University	200	80
NINDS, study section ZNS1 SRB-S	200	
Top Doctors, New York Metro Area, Castle Connolly	2008-prese	ent
America's Top Surgeons, Castle Connelly	2008-prese	ent
Top Doctors, New York Magazine	2009-prese	
NINDS study section, ZNS-1 SRB-B 12	200	
Visiting Professor, UCSD	200	09
The Global Directory of Who's Who (Top Doctors)	2009-prese	
America's Top Doctors for Cancer, Castle Connelly	2010-prese	
NIH Study Section ZRG1 ETTN-B	20	
President, Medical Strollers	20	
Visiting Professor, St. Catherine's College, Oxford, England	20	
Visiting Professor, MGH, Harvard	20	
Visiting Professor, U. Rochester	20	
Wellcome Trust Grant	20	
CTSC GRANT UL1-RR024996	20	10

American Academy of Neurological Surgery	2010
Visiting Professor, Johns Hopkins	2010
Visiting Professor, Bombay Neurological Association, India 201	1
Visiting Lecturer, Dr. Balabhatic Nanavati Hospital, Mumbai, India 201	1
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, 1st International Forum on Skull base Trauma and Minimally Invasive	
Neurosurgery and 1st Workshop on Endoscopic Skull base Surgery and 12th Works	hop on
Latest Neurosurgical Advancements, Neurosurgical Department of Changzheng Ho	spital,
Shanghai, China	2012
Visiting Professor, Dept of Neurosurgery, Yale-New Haven Medical Center	2012
International Faculty, 5th World Congress for Endoscopic Surgery of the Brain,	2012
Skull Base and Spine, Vienna, Austria	2012
Honored Guest, Society for British Neurosurgeons, Aberdeeen, 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 Paolo, Brazil	2013
Plenary Lecture, International League against Epilepsy Meeting, Montreal	2013
Plenary Lecture, Mexican Neurosurgical Congress	2013
Honored Guest Lecturer, 1st 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, 6th World Congress for Endoscopic Surgery of the Brain,	2014
Skull Base and Spine, Milan, Italy	
Invited Faculty, George Ojemann Symposium	2014
Invited Faculty, European Association of Neurosurgical Societies Meeting, Prague 201	4
Keynote Speaker, 28th Epilepsy Society of Australia Meeting	2014
Best Poster, 5th London-Innsbruck Colloquium on Acute Seizures	2015

Keynote Speaker, 4th Symposium on Endoscopic Transsphenoidal Surgery		2015
Kocaeli, Turkey		
Honored Guest Speaker, 2 nd International Congress of Neurosurgery, Ain Shams		2016
Cairo, Egypt		
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, 7th 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, 3rd Annual Meeting of Korean Society of Endoscopic Neurosurger	у	2019
Plenary Lecture, 16th International Pituitary Congress		2019
Honored Guest, 8th 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		2020
Honored Lecturer, Miami Global Brain Tumor Symposium		2020
Honored Lecturer, Moroccan Society of Neurosurgery		2020
Visiting Professor, CNS Vrtual Visiting Professor		2020
Guest Emeritus, Jaipur Skull Base Live Surgery Course, India		2020
Honored Guest, 9th Int'l Masters Course in Brain Tumor Surgery		2020
Honored Guest, Shifa Medical Center, Islamabad, Pakistan		2021
Visiting Professor, USC		2021
Honored Guest, Xth Int'l Masters Course in Brain Tumor Surgery		2021
Honored Guest, National University of Singapore		2021
Visitin Professor, Barron Neurological Institute		2021

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. <u>CURRENT AND PAST INSTITUTIONAL RESPONSIBILITIES AND PERCENT EFFORT</u>

Teaching

Courses

Epilepsy/Cortical Circuitry Journal	Columbia U	Instructor	2000-02
Club			
Epilepsy Surgery	UMDNJ Med School		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 Mi	llenium. A National Se	minar - Faculty	2001
Caring for People with Epilepsy: Treat	tment Updates Special	Concerns - Faculty	2002
Fourteenth Annual Long Island Region	nal Conference, EFLI -	Faculty	2002
Helping people with epilepsy: combin	ing compassion and ex	pertise - Faculty	2002
New Avenues for Treating Brain Disea	ase. Thinking Outside t	he Box - Faculty	2003
Brain Tumors: Advances in Diagnosis	and Treatment - Facult	ty	2004
The Art of Endoscopic Skull Base Sur	gery – Course Director	•	2005-6
Current Topic in Neurology: Advances	s in Epilepsy - Faculty		2006
Advanced Endoscopic Skull Base and	Pituitary Surgery - Co	urse Director	2006
Advanced Endoscopic Skull Base and	Pituitary Surgery - Co	urse Director	2007
New Frontiers in Neurological Surgery	y – Faculty		2008
Advanced Endoscopic Skull Base and	Pituitary Surgery - Co	urse Director	2008
-	- 10011001 j = 011 g = 1		
Brain and Spine in 2009 – Course Dire			2009-10

Tavaneca Enabeopie bitan	l Base and Pituitary Surgery - Course Director	2009
Brain and Spine – Course D	virector	2010-12
The Art and Science of Glio	oma Therapy - Course Director	2010
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2010
Advanced Endoscopic Sinus	s Surgery – Faculty	2010
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2011
New York Advanced Rhinol	logy and Sinus Surgery – Faculty	2012
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2012
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2013
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2014
Advances in Brachytherapy,	, An International Symposium -Faculty	2015
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2015
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2016
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2017
Pituitary Tumors: Diagnosti	c and Treatment Dilemmas - Course Director	2017
Advanced Endoscopic Skull	l Base and Pituitary Surgery - Course Director	2018
Pituitary Disorders Across th	he Age Spectrum - Course Director	2018
Minimally Invasive Cranial	Neurosurgery – Course Co-Director	2019
Pituitary Tumors: Medical, S	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, S	Surgical and Radiotherapy Treatments - Course Co-Director	2021
Mentoring – Basic Science I	Research	
Mentoring – Basic Science I Vikram Kumar		1996-97
Vikram Kumar Accepted to Harvard	Undergraduate Columbia University d Medical School/MIT, Paul and David Soros Fellowship	1996-97
Vikram Kumar Accepted to Harvard Residency Brigham	Undergraduate Columbia University d Medical School/MIT, Paul and David Soros Fellowship & Women's Hospital. Co-Founder Dimage	
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer	Undergraduate Columbia University d Medical School/MIT, Paul and David Soros Fellowship & Women's Hospital. Co-Founder Dimage Undergraduate Columbia University	1996-97
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer	Undergraduate Columbia University d Medical School/MIT, Paul and David Soros Fellowship & Women's Hospital. Co-Founder Dimage	1996-97
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer	Undergraduate Columbia University d Medical School/MIT, Paul and David Soros Fellowship & Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate F	1996-97 Professor
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Fundergraduate Pace University	1996-97
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate F Undergraduate Pace University ptorship, Denver Nuggets digital strategist	1996-97 Professor
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precept Nina Bowens, B.A.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Fundergraduate Pace University Undergraduate Pace University ptorship, Denver Nuggets digital strategist Medical Student WMC of Cornell	1996-97 Professor
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Fotorship, Denver Nuggets digital strategist Medical Student WMC of Cornell gery, Surgery residency, Vasscular surgeon in CA	1996-97 Professor 2002-04
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate F Undergraduate Pace University ptorship, Denver Nuggets digital strategist Medical Student WMC of Cornell gery, Surgery residency, Vasscular surgeon in CA Medical Student WMC of Cornell	1996-97 Professor 2002-04
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Foundergraduate Undergraduate Pace University Pace Univers	1996-97 Professor 2002-04 2003
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A. Received NINDS Re Danny Wong, B.S.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate F Undergraduate Pace University ptorship, Denver Nuggets digital strategist Medical Student WMC of Cornell gery, Surgery residency, Vasscular surgeon in CA Medical Student WMC of Cornell esearch Supplement for Minorities Grant, Surgery Intern Technician WMC of Cornell	1996-97 Professor 2002-04 2003
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A. Received NINDS Re Danny Wong, B.S.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate F Undergraduate Pace University ptorship, Denver Nuggets digital strategist Medical Student WMC of Cornell gery, Surgery residency, Vasscular surgeon in CA Medical Student WMC of Cornell esearch Supplement for Minorities Grant, Surgery Intern Technician WMC of Cornell	1996-97 Professor 2002-04 2003 2003-07
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A. Received NINDS Re Danny Wong, B.S. Ashesh Mehta, M.D., Ph.D.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate F Undergraduate Pace University ptorship, Denver Nuggets digital strategist Medical Student WMC of Cornell gery, Surgery residency, Vasscular surgeon in CA Medical Student WMC of Cornell esearch Supplement for Minorities Grant, Surgery Intern Technician WMC of Cornell	1996-97 Professor 2002-04 2003 2003-07 2002-04
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A. Received NINDS Re Danny Wong, B.S. Ashesh Mehta, M.D., Ph.D.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Foundergraduate Undergraduate Pace University Otorship, Denver Nuggets digital strategist Medical Student WMC of Cornell Gery, Surgery residency, Vasscular surgeon in CA Medical Student WMC of Cornell Gesearch Supplement for Minorities Grant, Surgery Intern Technician WMC of Cornell Resident/Post-doc WMC of Cornell Surgery, North Shore/LIJ – Harvey Cushing Institute Post-doctoral Fellow WMC of Cornell	1996-97 Professor 2002-04 2003-07 2002-04 2002-03 2001-04
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A. Received NINDS Re Danny Wong, B.S. Ashesh Mehta, M.D., Ph.D. Director of Epilepsy Minah Suh Ph.D.	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Foundergraduate Pace University Undergraduate Pace University ptorship, Denver Nuggets digital strategist Medical Student WMC of Cornell gery, Surgery residency, Vasscular surgeon in CA Medical Student WMC of Cornell esearch Supplement for Minorities Grant, Surgery Intern Technician WMC of Cornell Resident/Post-doc WMC of Cornell Surgery, North Shore/LIJ – Harvey Cushing Institute Post-doctoral Fellow WMC of Cornell Assistant Professor WMC of Cornell	1996-97 Professor 2002-04 2003-07 2002-04 2002-03 2001-04 2004-08
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A. Received NINDS Res Danny Wong, B.S. Ashesh Mehta, M.D., Ph.D. Director of Epilepsy Minah Suh Ph.D. Received \$160,000 res	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Foundergraduate Pace University Pace Unive	1996-97 Professor 2002-04 2003-07 2002-04 2002-03 2001-04 2004-08 ently
Vikram Kumar Accepted to Harvard Residency Brigham Ilya Laufer SUNY Stoneybrook MSK neurosurgery Alex Labidou Neurosurgery Precep Nina Bowens, B.A. Coryell Prize in Surg Challon Perry, B.A. Received NINDS Res Danny Wong, B.S. Ashesh Mehta, M.D., Ph.D. Director of Epilepsy Minah Suh Ph.D. Received \$160,000 res	Undergraduate Columbia University Medical School/MIT, Paul and David Soros Fellowship Women's Hospital. Co-Founder Dimage Undergraduate Columbia University Medical School, WMC Neurosurgery residency, Associate Foundergraduate Pace University Undergraduate Pace University ptorship, Denver Nuggets digital strategist Medical Student WMC of Cornell gery, Surgery residency, Vasscular surgeon in CA Medical Student WMC of Cornell esearch Supplement for Minorities Grant, Surgery Intern Technician WMC of Cornell Resident/Post-doc WMC of Cornell Surgery, North Shore/LIJ – Harvey Cushing Institute Post-doctoral Fellow WMC of Cornell Assistant Professor WMC of Cornell	1996-97 Professor 2002-04 2003-07 2002-04 2002-03 2001-04 2004-08 ently

Currently Professor	Post-doctoral Fellow WMC of Cornell of Physics and Director, Center for Neurodynamics, St	2001-04 . Louis
University		
ŕ	Post-Doctoral Fellow WMC of Cornell	2004-05
_	ery Residency, Surgeon Montefiore Hospital, Bronx, N	
Hongtao Ma, PhD	Post-Doctoral Fellow WMC of Cornell	2004-present
	of Neurosurgery, WMC of Cornell	
Mingrui Zhao, PhD	Post-Doctoral Fellow WMC of Cornell	2004-present
	of Neurosurgery, WMC of Cornell	
Andrew Geneslaw, B.A.	Research Associate WMC of Cornell	2006-2008
	l, Pediatrics residency Columbia, Asst Prof Pediatrics	
Alon Mass	Research Associate WMC of Cornell	2007
Cornell Undergradua	te on Urban Semester	
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	2010-2011
Accepted to Brown N	Medical School	
Kunal Patel	Weill Cornell Medical Student/AANS Fellowship	2012
Accepted to UCLA N	Neurosurgery residency program	
Sotiros Keros, MD	NSADA K12 Awardee WMC of Cornell	2012-2015
Assistant Professor P	Pediatric Neurology, WMC of Cornell	
Sam Harris PhD	Post-Doctoral Fellow, WMC of Cornell	2012-2013
Senior Staff Scientist	t, University College London	
Andy Daniel BA	Research Associate, WMC of Cornell	2014-2017
PhD in Neuroscience	e, Washington University, St. Louis	
Eliza Baird-Daniel BA	Research Associate, WMC of Cornell	2015-2017
Medical Student, Un	iversity of Colorado	
Poornima Gadamsetty PhD	Research Associate, WMC of Cornell	2016-2018
Data Quality Scientis	st, Interpreta	
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	Underraduate, Cornell University	2019
Sydney Kaye	Undergraduate, U Penn	2019
Peijuan Luo PhD	Post-Doctoral Fellow, Jilin University China	2019
	•	

Mentoring – Clinical Research Surgical Technique

Neurosurgery Residents

Joseph Yazdi, Catherine Mazzola, Richard Schlenk, Raj Raab, Hooman Asmi, Martin Zonanshayn, Roger Hartl, Miltos Sugiultzoglu, 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

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 present

2008-

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 Bhangoo 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 Dziedzic (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 (Itay), Alberto Torres Diaz (Spain), Monica Lem (Mexico)), Reginald Fong (Geisinger), Rodrigo Becco (Brazil),

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 (Columbia)	2018
Saniya Godil (Vanderbilt)	2019
Brett Youngerman (Columbia Presbyterian)	2019
Benjamin Rapoport (Cornell)	2020
Alex Michael (Southern Illinois University)	2020
Fraser Henderson (Medical University of South Carolina)	2021

Clinical Care

Senior Mentor

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

Leadership in Academic Mentorship Program, WMC of Cornell U

2014

Director of Epilepsy Surgery	WMC of Cornell U	2001-current
Director, Center for Minimally	WMC of Cornell U	2005-current
Invasive Skull Base and Pituitary	Surgery	
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-current

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	WMC of Cornell U, NYC	2001-present
Epilepsy Research Fund		•
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	ý	
Cancer Biology Subcommittee	WMC of Cornell U, NYC	2003
Westchester Campus Initiativ	ve .	
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	WMC of Cornell U, NYC	2008 -2012
Endocrinology		
Search Committee for Director,	WMC of Cornell U, NYC	2008-2013
The Appel Institute for Alzheim	er's Research	
Director, Endoscopic Skull Base	WMC of Cornell U, NYC	2009-present
Surgery Fellowship		_
PO Managed Care Committee	WMC of Cornell U, NYC	2010-2015
		14

Chair, Search Committee,	WMC of Cornell U, NYC	2011-2014
Neuroendocrinologist		
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

1992-93

"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.

Post-Doctoral Fellow, Departments of Neurology and Neurosurgery

1996-97

New York University, NYC

"Language localization with subdural grid stimulation mapping"

P.I. – Kenneth Perrine, Ph.D.

Post-Doctoral Fellow, Department of Biology

1996-97

Columbia University, NYC

"Calcium imaging and electrophysiology in rat neocortical slice and hemispheric preparations" P.I. – Rafael Yuste, M.D., Ph.D.

Post-Doctoral Fellow, Department of Neurobiology

1999

Max-Planck Institute, Munich, Germany

"Intrinsic Signal Imaging of Neocortical Epilepsy"

P.I. – Tobias Bonhoeffer, Ph.D.

Director of Epilepsy Research, Department of Neurological Surgery

2001-present

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.

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

Christopher Mason PhD, Department of Molecular Biology, Weill Cornell Medical College Infectious contamination of CSF during extended transsphenoidal skull base surgery

Augustine Choi MD, Department of Medicine, Weill Cornell Medical College DNA fragments in CSF as a biomarker of inflammation in extended transsphenoidal skull base surgery

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

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 ventricluostomy 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 2011-present

WMC of Cornell U

P.I. Theodore H. Schwartz, M.D.

Injection of Indigocarmine to Increase Extent of Resection 2011-present

of Low Grade Gliomas

WMC of Cornell U

P.I. Theodore H. Schwartz, M.D.

A Pilot Study to Determine the Variance of [18F]Fluorocholine PET Signals 2013-present

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.

North American Skull Base Society Multicenter Patient Registry 2013-present

Multicenter centralized database of skull base tumor surgery

Co-P.I. Theodore H. Schwartz, M.D.

Seizure localization in humans: the effect of inhibitory surround on the EEG 2013-2018

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.

Hippocampal stimulation mapping 2014-2018

Multicenter Trial

P.I – Marla Hamburger, PhD, Site coordinator/Site P.I. – Theodore H. Schwartz, M.D.

5-ALA endoscopic imaging of benign skull base tumors

2019-2020

P.I.-Theodore H. Schwartz, M.D.

Negative pressure antechamber for reducing aeresolization of viral particles during endoscopic skull base surgery

2020-present

P.I.-Theodore H. Schwartz, M.D.

Current percent eff	fort %	WMC Students	WMC Researchers
Teaching	5	X	X
Clinical Care	75	X	
Administration	5	X	X
Research	15	X	X
TOTAL	100%		

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

Location	Direct Support	Year	PI
U. of Washingt	on \$5,000	1991	P.I. Theodore Schwartz, M.D.
Gradua	te Research Fellow – ana	alyzed human in	traoperative extracellular microelectrode
data - 1	00%		
Harvard Unive	rsity \$12,000	1991	P.I. Theodore Schwartz, M.D
Gradua	te Research Fellow – ana	alyzed human in	traoperative extracellular microelectrode
data - 1	00%		
Columbia-Pres	byterian\$1,500	1997	P.I. Theodore Schwartz, M.D.
Resider	nt Research Grant – In vi	tro calcium imag	ging of human neocortex - 20%
Epilepsy Found	dation \$40,000	1999	P.I. Theodore Schwartz, M.D.
Researc	h/Clinical Training Fello	owship – Epileps	sy surgery fellowship and In vivo optical
imaging	g of neocortical epilepsy	- 100%	
German Gover	nment 20,000 DM	1999	P.I. Theodore Schwartz, M.D.
Von Hu	mboldt 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 N	S40726 \$1,300,000	2000	P.I. Rafael Yuste, M.D., Ph.D.
Co-Inve	estigator, In vitro calciun	n 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%	/2
NINDS K08 NS43799 \$657,450. 2002-07 P.I. Theodore Schwartz, M.D.	0
Investigator- In vivo optical imaging of neocortical epilepsy in acute and chronic rat	
models of neocortical epilepsy - 50% The David Franchism \$100,000 and \$2002,05 and \$100,000 and \$2002,05 and \$100,000 and	
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 epiler - 10%	ρsy
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	
	D
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.ITracy Butler, M.D.	
Collaborator, Use of PET and fMRI to investigate role of inflammation in epilepsy – 0	1%
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 UL1-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. Thodore H. Schwartz MD
Mentor, Bassett FIENS Global Neurosurgery Fellowship

Fundraising

1. Brain Tumor and Epilepsy Research and Clinical Development Fund

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

Television	
NBC News - Live at 5 "IMRI 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

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 volunetter with <u>Mission:Brain</u> (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 mission in Guadelajara, Mexico performing brain tumor surgery and lecturing to the students.

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 nd World Congress for Endoscopic	2007
	Surgery of the Brain, Skull Base and Spine	
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 rd World Congress for Endoscopic	2008
	Surgery of the Brain, Skull Base and Spine	
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 20	
,	Surgery of the Brain, Skull Base and Spine	-
Moderator, Afternoon Seminar	3rd World Congress for Endoscopic	2010
,	Surgery of the Brain, Skull Base and Spine	
	5 , ,	24

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	American College of Surgeons	2010
Scientific Program Committee	CNS	2010
Course Director	CNS, Intracranial Endoscopy	2010
Faculty, Luncheon Seminar	CNS, Skull Base Endoscopy	2010
Course Director	Endoscopic Skull Base Surgery, Anspach	2010
Chair	Van Wagenen Selection Committee	2010
Invited International Faculty	Anterior Skull Base Surgery Workshop,	2010
mivited international racuity	Mumbai, India	2011
Faculty Skull Rasa Dissection		2011
Faculty, Skull Base Dissection	NASBS, Sellar and Suprasellar Approaches	2011
Scientific Program Director Comm. on Applicants, Manhattan	Neurosurgical Society of America American College of Surgeons	2011
		2011
Faculty, Breakfast Seminar	Parasellar Surgery, AANS CNS 2D Surgical Anatomy Course	
Faculty	CNS 3D Surgical Anatomy Course	2011 2011
Faculty Course Director	Masters in Neuroendoscopy, CNS	
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	5th World Congress Congress for Endoscopic	2012
	Surgery of the Brain, Skull Base and Spine, Austria	
Abstract Reviewer	Tumor section, AANS	2012
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	11th 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
		2013
Symposium Lecture	AANS, The Future of Skull Base Surgery	2013
Symposium Lecture	AANS, Stereotactic and Functional Section	
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
<i>y</i>		

Faculty	Reconstructive Skull Base Course, CNS	2015
Faculty	Inaugural One Health Veterinary Conference	2015
Guest Lecturer	4th Symposium on Endoscopic Surgery, Turkey	2015
Faculty	4 th Annual Barrow Neuro-Oncology Symposium	2015
Meeting Organizer	Optics and the Brain	2013
Guest Lecturer	2 nd 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 Presdient	7 th World Congress Congress for Endoscopic	2016
Congress rescient	Surgery of the Brain, Skull Base and Spine, Chicago	2010
Guest Lecturer/Moderator	7th World Congress Congress for Endoscopic	2016
0 1000 200 100 100 100 100 100 100 100 100 100	Surgery of the Brain, Skull Base and Spine, Chicago	_010
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	8th World Congress Congress for Endoscopic	2018
	Surgery of the Brain, Skull Base and Spine, Barcelon	a
Dissection Expert	8th World Congress Congress for Endoscopic	2018
	Surgery of the Brain, Skull Base and Spine, Barcelon	a
Faculty	7 th 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 Professor	2020
Faculty	U Miami Cerebrovasc & Skull Base Int'l Symposium	2020
Guest Emiritus	Jaipur Skull Base Live Surgery Course, India	2020
Faculty	9th 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	10th Int'l Masters Course in Brain Tumor Surgery	2021
Faculty	Ann. Southern California Pituitary Symposium at USC	2021
Faculty	Parsellar Tumor Sympsium, CNS	2021
Faculty	Singaport University, Cushing's Symposium	2021
Faculty	1st 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

L. BIBLIOGRAPY

Peer Reviewed Articles

- 1. Haglund MM, Ojemann GA, **Schwartz TH**, Lettich E. Neuronal activity in human lateral temporal lobe during serial retrieval from short-term memory. <u>Journal of Neuroscience</u> 14:3:1507-1515, 1994
- 2. Wilder TM, **Schwartz TH**, Carmel PW, Wood-Smith D. Dural ossification in a patient with Apert's Syndrome. <u>Annals of Plastic Surgery</u> 34:420-423, 1995
- 3. **Schwartz TH**, Lycette CA, Yoon SS, Kargman DE. Radiographic confirmation of third nerve fascicular anatomy. <u>Journal of Neurology, Neurosurgery and Psychiatry</u> 59;3:338, 1995
- 4. **Schwartz TH**, Solomon RA. Perimesencephalic subarachnoid hemorrhage: review of the literature. <u>Neurosurgery</u> 39:433-444, 1996.

- 5. **Schwartz TH**, Ojemann GA, Haglund MM, Lettich E. Cerebral lateralization of neuronal activity during naming, reading and line-matching. <u>Cognitive Brain Research</u> 4:263-273, 1996.
- 6. **Schwartz TH**, Yoon SS, Cutruzzola FW, Goodman RR. Third ventriculostomy: postoperative ventricular size and outcome. <u>Minimally Invasive Neurosurgery</u> 39;4:122-129, 1996
- 7. **Schwartz TH**, Bazil CW, Walczak TS, Chan S, Nordli DR, Pedley TA, Goodman RR. The predictive value of electrocorticography in resection for limbic epilepsy associated with mesial temporal sclerosis. <u>Neurosurgery</u> 40:302-311, 1997.
- 8. **Schwartz TH**, Chang Y, Stein BM. Unusual intramedullary spinal vascular lesion: case reports. Neurosurgery 40:1295-1301, 1997.
- 9. **Schwartz TH**, Ojemann GA, Dodrill CB. Reading errors following right hemisphere injection of sodium amytal. <u>Brain and Language</u> 58:70-91, 1997.
- 10. **Schwartz TH**, Rabinowitz D, Unni V, Kumar VS, Smetters D, Yuste R. Networks of coactive neurons in developing layer I. <u>Neuron</u> 20:541-552, 1998.
- 11. **Schwartz TH**, De La Paz R, Nordli D, Resor S, Goodman RR. Functional MRI localization of ictal onset to dysplastic cleft with intraoperative electrophysiologic confirmation and clinical follow-up. <u>Neurosurgery</u> 43:639-645, 1998.
- 12. **Schwartz TH**, Devinsky O, Doyle W, Perrine K. Preoperative predictors of anterior temporal language areas. <u>Journal of Neurosurgery</u> 89:962-970, 1998.
- 13. **Schwartz TH**, Payne CR, Duong H, Pile-Spellman JP, Holtzman RNN. Spontaneous resolution of a postoperative residual aneurysm neck: case report. <u>Journal of Neurovascular Disease</u> 3;6:253-256, 1998.
- 14. **Schwartz TH**, Kim S, Glick RS, Bagiella E, Fetell MR, Balmaceda C, Stein BM, Sisti MB, Bruce JN. Adult supratentorial ependymomas. <u>Neurosurgery</u> 44;4:721-731, 1999.
- 15. **Schwartz TH**, Devinsky O, Doyle W, Perrine K. Function specific high probability "nodes" identified in posterior language cortex. <u>Epilepsia</u> 40;5:575-583, 1999.
- 16. **Schwartz TH**, Ho B, Bruce JN, Feldstein NA, Goodman RR. Ventricular volume following third ventriculostomy. <u>Journal of Neurosurgery</u> 91;1:20-25, 1999.
- 17. Aguilo A, **Schwartz TH**, Kumar VS, Peterlin ZA, Tsiola A, Soriano E, Yuste R. Involvement of Cajal-Retzius neurons in spontaneous correlated activity of embryonic

- and postnatal layer I from wild type and reeler mice. <u>Journal of Neuroscience</u> 19;24:10856-10868, 1999.
- 18. **Schwartz TH**, Hibshoosh H, Riedel C. Estrogen and progesterone receptor-negative T11 vertebral hemangioma presenting as a post-partum compression fracture: case report and management. <u>Neurosurgery</u> 46:218-221, 2000.
- 19. **Schwartz TH**, Mayer S. Quadrigeminal variant of perimesencephalic nonaneurysmal subarachnoid hemorrhage. <u>Neurosurgery</u> 46:584-588, 2000.
- Schwartz TH, McCormick PC. Intramedullary ependymomas. Clinical presentation, surgical treatment strategies and prognosis. <u>Journal of Neuro-Oncology</u> 47;3:211-218, 2000.
- 21. **Schwartz TH**, McCormick PC. Non-neoplastic intramedullary pathology. Diagnostic dilemma: To bx or not to bx. <u>Journal of Neuro-Oncology</u> 47;3:283-292, 2000.
- 22. **Schwartz TH**, McCormick PC. Introduction. <u>Journal of Neuro-Oncology</u> 47;3:187, 2000.
- 23. **Schwartz TH**, Haglund MM, Lettich E, Ojemann GA. Asymmetrical activity of human temporal lobe neocortical neurons during rhyming and line-matching. <u>Journal of Cognitive Neuroscience</u> 12;5:802-812, 2000.
- 24. **Schwartz TH**, Bazil CW, Forgione M, Bruce JN, Goodman RR. Do reactive post-resection "injury" spikes exist? <u>Epilepsia</u> 41;11:1463-1468, 2000.
- 25. **Schwartz TH**, Bonhoeffer T. *In vivo* optical mapping of neocortical epilepsy and surround inhibition. <u>Epilepsia</u> 41;7:50, 2000.
- 26. **Schwartz TH**, Bruce JN. Extended frontal approach with bilateral orbitofrontoethmoidal osteotomies for removal of a giant extracranial schwannoma in the nasopharynx, sphenoid sinus and parapharyngeal space. <u>Surgical Neurology</u> 55;5:270-274, 2001.
- 27. **Schwartz TH**, Bonhoeffer T. *In vivo* optical mapping of neocortical epilepsy and inhibitory surround in ferret cerebral cortex. <u>Nature Medicine</u> 7;9:1063-1067, 2001.
- 28. **Schwartz TH**, Spencer DD. Strategies for reoperation after comprehensive epilepsy surgery. <u>Journal of Neurosurgery</u> 95;4:615-623, 2001.
- 29. **Schwartz TH**, Rhiew R, Isaacson S, Orazi A, Bruce JN. Association between intracranial plasmacytoma and multiple myeloma. A clinicopathological outcome study. Neurosurgery 49;5:1039-1045, 2001.

- 30. Holodny AI, **Schwartz TH**, Ollenschleger M, Liu W-C, Schulder M. Tumor involvement of the corticospinal tract: diffusion magnetic resonance tractography with intraoperative correlation. Case illustration. <u>Journal of Neurosurgery</u> 95;6:1082, 2002.
- 31. **Schwartz TH**, Marks DM, Pak J, Mandelbaum D, Holodny AI, Schulder M. Standardization of amygdalo-hippocampectomy with intraoperative magnetic resonance imaging. Preliminary experience. <u>Epilepsia</u> 43;4:430-436, 2002.
- 32. Barone D, **Schwartz TH**. Surgical options for seizure disorders. <u>JAAPA</u> 16:2:29-35, 2003.
- 33. **Schwartz TH**, Farkas J. Quadrigeminal non-aneurysmal subarchnoid hemorrhage. A true variant of perimesencephalic subarachnoid hemorrhage. <u>Clinical Neurology and Neurosurgery</u> 105:95-98, 2003.
- 34. **Schwartz TH.** Optical imaging of epileptiform events in visual cortex in response to patterned photic stimulation. <u>Cerebral Cortex</u> 13;12:1287-1928, 2003.
- 35. Angevine P, Parsa A, **Schwartz TH**, McCormick P. Ventral approach: extrapleural thoracotomy. <u>Techniques in Neurosurgery</u> 8;2:122-129, 2003.
- 36. Windrem MS, Nunes MC, Rashbaum WK, **Schwartz TH**, Goodman RA, McKhann G, Roy NS, Goldman SA. Fetal and adult human oligodendrocyte progenitor cell isolates myelinate the congenitally dysmyelinated brain. <u>Nature Medicine</u> 10;1: 93-7, 2004.
- 37. Mack PF, Perrine K, Kobylarz E, **Schwartz TH**, Lien CA. Dexmedetomidine and neurocognitive testing in awake craniotomy. <u>Journal of Neurosurgical Anesthesiology</u>16;1: 20-5, 2004.
- 38. **Schwartz TH,** Chen, L-M, Friedman RM, Spencer DD, Roe AW. Intraoperative optical imaging of face topography in human somatosensory cortex. <u>Neuroreport</u>15;1527-1532, 2004.
- 39. Suh M, Bahar S, Mehta A, **Schwartz TH**. Temporal dependence in uncoupling of blood volume and oxygenation during interictal epileptiform events in rat neocortex. <u>Journal of Neuroscience</u> 25:1;68-77, 2005.
- 40. Placantonakis DG, Ney G, Edgar M, Souweidane M, Hosain S, **Schwartz TH**. Neurosurgical management of medically intractable epilepsy associated with Hypomelanosis of Ito. <u>Epilepsia</u> 46;2: 329-331, 2005.
- 41. **Schwartz TH.** The application of optical recording of intrinsic signals to simultaneously acquire functional, pathological and localizing information and its potential role in neurosurgery. <u>Stereotactic and Functional Neurosurgery</u> 83;1:36-44, 2005.

- 42. Heller SL, Heier L, Watts R, **Schwartz TH**, Zelenko N, Doyle W, Devinsky O. Evidence of cerebral reorganization following perinatal stroke demonstrated with fMRI and DTI tractography. <u>Journal of Clinical Imaging</u> 29:283-287, 2005.
- 43. Mehta AD, Labar D, Dean A, Harden C, Hosain S, Pak J, Marks D, **Schwartz TH.** Frameless stereotactic placement of depth electrodes. <u>Journal of Neurosurgery</u>102:1040-1045, 2005.
- 44. Luther N, Greenfield JP, Chadburn A, **Schwartz TH**. Intracranial nasal natural killer/T-cell lymphoma: immunopathologically-confirmed case and review of the literature.

 <u>Journal of Neuro-Oncology</u> 75:185-188, 2005.
- 45. **Schwartz TH**, Stieg PE, Anand VK. Endoscopic transsphenoidal pituitary surgery with intraoperative magnetic resonance imaging. <u>Neurosurgery</u> 58; 1 Suppl:ONS44-ONS51, 2006.
- 46. Shariff S, Suh M, Zhao M, Ma H, **Schwartz TH**. Recent developments in oximetry and perfusion-based mapping techniques and their role in the surgical treatment of neocortical epilepsy. <u>Epilepsy & Behavior</u> 8:363-375, 2006.
- 47. Bahar S, Suh M, Zhao M, **Schwartz TH**. Intrinsic optical signal imaging of neocortical seizures: the 'epileptic dip'. <u>NeuroReport</u> 17:499-503, 2006
- 48. **Schwartz TH**, Jeha L, Tanner A, Bingaman W, Sperling MR. Late seizures in patients initially seizure free after epilepsy surgery. <u>Epilepsia</u> 3:1-7, 2006.
- 49. Suh M, Bahar S, Mehta AD, **Schwartz TH**. Blood volume and hemoglobin oxygenation response following electrical stimulation of human cortex. <u>NeuroImage</u> 31;66-75, 2006.
- 50. Kuo Y-H, Edgar MA, Luther N, **Schwartz TH**. Novel low-grade glioneuronal neoplasm presenting in an octogenarian. Case report and review of the literature. <u>Clinical Neurology and Neurosurgery</u>:108;426-432, 2006
- 51. Sim FJ, Lang JK, Waldau B, Roy NS, **Schwartz TH**, Pilcher WH, Chandross KJ, Natesan S, Merrill JE, Goldman SA. Complementary patterns of gene expression by human oligodendrocyte progenitors and their environment predict determinants of progenitor maintenance and differentiation. <u>Annals of Neurology</u> 59:763-779, 2006.
- 52. Molholm S, Sehatpour P, Mehta AD, Shpaner M, Gomez-Ramirez M, Ortigue S, Dyke JP, **Schwartz TH**, Foxe JJ. Audio-visual multisensory integration in superior parietal lobule revealed by human intracranial recordings. <u>Journal of Neurophysiology</u>, 96:721-729, 2006.

- 53. Suh M, Ma H, Zhao M, Shariff S, **Schwartz TH.** Neurovascular coupling and oximetry during epileptic events. <u>Molecular Neurobiology</u> 33;3:181-197, 2006.
- 54. Anand VK, **Schwartz TH**, Hiltzik DH, Kacker A. Endoscopic transphenoidal pituitary surgery with real-time intraoperative magnetic resonance imaging. <u>American Journal of Rhinology</u> 20;4:401-5, 2006.
- 55. Dyke JP, Sanelli PC, Serventi JM, Stieg PE, **Schwartz TH**, Ballon D, Shungu DC, Pannullo SC. Monitoring the effects of BCNU chemotherapy wafers (Gliadel®) in glioblastoma multiforme with proton magnetic resonance spectroscopic imaging at 3.0 Tesla. Journal of Neuro-Oncology 82;1:103-10, 2007.
- 56. Laufer I, Anand VK, **Schwartz TH**. Endoscopic, endonasal extended transsphenoidal, transplanum, transtuberculum approach for resection of suprasellar lesions. <u>Journal of Neurosurgery</u> 106:3:400-406, 2007.
- 57. Tabaee A, Placantonakis D, **Schwartz TH**, Anand VK. Intrathecal fluorescein in endoscopic skull base surgery. <u>Otolaryngology and Head and Neck Surgery</u> 137:2:316-320, 2007.
- 58. Tabaee A, Anand VK, Brown S, Lin JW, **Schwartz TH**. Algorithm for reconstruction following endoscopic skull base surgery. <u>Laryngoscope</u> 117;7:1133-1137, 2007.
- 59. Brown S, Anand VK, Tabaee A, **Schwartz TH**. The role of perioperative antibiotics in endoscopic skull base surgery. <u>Laryngoscope</u>:117;9:1528-1532, 2007.
- 60. Placantonakis D, Tabaee A, Anand VK, Hitzlik D, **Schwartz TH**. Safety of low dose intrathecal fluorescein in endoscopic skull base surgery. <u>Neurosurgery</u> 61(3 Suppl) 161-165, 2007.
- 61. Fraser JF, Anand VK, **Schwartz TH**. Endoscopic biopsy sampling of tophaceous gout of the odontoid process. Case report and review of the literature. <u>Journal of Neurosurgery Spine</u> 7:61-64, 2007.
- 62. Zhao M, Suh M, Ma H, Perry C, Geneslaw A, **Schwartz TH**. Focal increases in perfusion and decreases in hemoglobin oxygenation precede seizure onset in spontaneous human epilepsy. <u>Epilepsia</u> 48:11:2059-2067, 2007.
- 63. **Schwartz TH**, Anand VK. The endoscopic endonasal transsphenoidal approach to the suprasellar cistern. <u>Clinical Neurosurgery</u> 54:1-10, 2007.
- 64. Harden CL, Huff JS, **Schwartz TH,** Dubinsky RM, Zimmerman RD, Weinstein S, Foltin JC, Theodore WH; Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Reassessment: neuroimaging in the emergency patient

- presenting with seizure (an evidence-based review): report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Neurology. 69;1:1772-80, 2007.
- 65. Greenfield J, **Schwartz TH.** Catheter placement for ommaya reservoirs with frameless surgical navigation: technical note. <u>Stereotactic and Functional Neurosurgery</u> 86:101-105, 2008.
- 66. Sehatpour P, Mulholm S, **Schwartz TH**, Mahoney JR, Mehta AD, Javitt DC, Stanton PK, Foxe JJ. Long-range oscillatory coherence across a frontal-occipital-hippocampal brain network during visual object processing: A human intracranial study. <u>Proceedings of the National Academy of Sciences</u> 18;105;11:4399-404, 2008.
- 67. Ayuso-Sacido A, Roy NS, **Schwartz TH**, Greenfield JP, Boockvar JA. Long-term expansion of adult human brain subventricular zone precursors. <u>Neurosurgery</u> 62:1;223-231, 2008.
- 68. Greenfield JP, Ayuso-Sacido A, **Schwartz TH**, Pannullo S, Souweidane M, Stieg PE, Boockvar JA. Use of human neural tissue for the generation of progenitors. <u>Neurosurgery</u> 62;1:21-30, 2008.
- 69. Brown S, Tabaee A, Singh A, **Schwartz TH**, Anand VA. Three-dimensional endoscopic sinus surgery: feasibility and technical aspects. <u>Otolaryngology and Head and Neck Surgery</u> 138:400-402, 2008.
- 70. Laufer I, Greenfield JP, Anand VK, Hartl R, **Schwartz TH**. Endonasal endoscopic resection of the odontoid in a nonachondroplastic dwarf with juvenile rheumatoid arthritis. Feasibility of the approach and utility of intraoperative iso-C 3D navigation. Journal of Neurosurgery Spine 8:366-370, 2008.
- 71. Leng L, Brown S, Anand, VK, **Schwartz TH**. "Gasket-seal" watertight closure in endoscopic cranial base surgery. <u>Neurosurgery</u> 62;ONS Suppl 2:ONSE342-343, 2008.
- 72. **Schwartz TH**, Fraser JF, Brown S, Tabaee A, Kacker A, Anand VK. Endoscopic cranial base surgery: classification of operative approaches. <u>Neurosurgery</u> 62:991-1005, 2008.
- 73. Greenfield JP, Leng L, Chaudhry U, Brown S, Anand VK, Souweidane MM, **Schwartz TH.** Combined simultaneous endoscopic transsphenoidal and endoscopic transventricular resection of a giant pituitary macroadenoma. <u>Minimally Invasive</u> Neurosurgery 51;5:306-309, 2008.
- 74. Greenfield JP, Cobb WS, Tsouris AJ, **Schwartz TH.** Frameless stereotactic minimally invasive tubular retractor system (METRxTM) for deep brain lesions. <u>Operative Neurosurgery</u> 63;2:ONS 334-340, 2008.

- 75. Fraser JF, Mass AY, Brown S, Anand VK, **Schwartz TH**. Transnasal endoscopic resection of cavernous sinus hemangioma. Technical note and review of the literature. <u>Skull Base</u> 5;18:309-315, 2008.
- 76. Souweidane MM, Hoffman CE, **Schwartz TH**: Cavum septi pellucidi et Vergae: Implications for transcaval interforniceal endoscopic surgery of the third ventricle. <u>Journal of Neurosurgery Pediatrics</u> 2;231-236, 2008.
- 77. Labar DL, Ponticello L, Nikolov B, Bell S, **Schwartz TH**. Stimulation parameters after vagus nerve stimulator replacement. <u>Neuromodulation: Technology at the Neural Interface</u> 11;2:132-134, 2008.
- 78. Leng L, Anand VK, Hartl R, **Schwartz TH**. Endonasal endoscopic resection of an os odontoideum to decompress the cervicomedullary junction A minimal access surgical technique. <u>Spine</u> 34;4:E139-43, 2009.
- 79. Fraser J, **Schwartz TH.** Three-dimensional neurostereoendoscopy: subjective and objective comparison to 3D. <u>Minimally Invasive Neurosurgery</u> 52:1;25-31, 2009.
- 80. Zhao M, Ma H, Suh M, **Schwartz TH.** Spatio-temporal dynamics of perfusion and oximetry signals during ictal discharges in the rat neocortex. <u>Journal of Neuroscience</u> 9;2814-2823, 2009.
- 81. Tabaee A, Anand VK, Barrón Y, Hiltzik DH, Brown S, Kacker A Mazumdar M, **Schwartz TH**. Endoscopic pituitary surgery: A systematic review and meta-analysis. Journal of Neurosurgery 111;3:145-154, 2009.
- 82. Ma H, Suh M, Zhao M, Perry C, Geneslaw A, **Schwartz TH.** Optical imaging of perfusion and oxymetry during epileptiform afterdischarges in human cortex. <u>Journal of Cerebral Blood Flow and Metabolism</u> 29;5:1003-10, 2009.
- 83. Ma H, Suh M, Zhao M, Perry C, **Schwartz TH.** Hemodynamics surrogates for neuronal activity maps during interictal epileptiform events in rat neocortex. <u>Journal of Neurophysiology</u> 101:2550-2562, 2009.
- 84. Tabaee A, Anand VK, Cappabianca P, Stamm A, Esposito F, **Schwartz TH**. Endoscopic management of spontaneous encephalocele of the lateral sphenoid sinus. <u>Journal of Neurosurgery</u> 112;5:1070-7, 2010.
- 85. Tabaee A, Anand VK, Barrón Y, Hiltzik DH, Brown SM, Kacker A, Mazumdar M, **Schwartz TH.** Predictors of short-term outcomes following endoscopic pituitary surgery. Clinical Neurology and Neurosurgery 111;2:119-123, 2009.

- 86. Tabaee A, Anand VK, Brown SM, Fraser J, Singh A, **Schwartz TH**. Three-dimensional endoscopic pituitary surgery. <u>Neurosurgery</u> ONS Suppl 2:ONS288-295, 2009.
- 87. Knopman J, Sigounas D, Huang C, Kacker A, **Schwartz TH**, Boockvar JA. Combined supraciliary and endoscopic endonasal approach for resection of frontal sinus mucoceles: technical note. <u>Minim Invasive Neurosurg</u> 52;3:149-5, 2009.
- 88. Wernicke AG, Sherr DL, **Schwartz TH,** Pannullo SC, Stieg PE, Trichter S, Sabbas AM, Parashar B, Nori D. The role of dose escalation with intracavitary brachytherapy in the treatment of localized CNS malignancies: long-term follow-up of outcomes and toxicities of a prospective study. <u>Brachytherapy</u> 9;1:91-9, 2010.
- 89. Fraser JF, Nyquist GG, Moore N, Anand VK, **Schwartz TH.** Endoscopic endonasal transclival resection of chordomas: operative technique, clinical outcome, and review of the literature. <u>Journal of Neurosurgery</u> 112: 1061-1069, 2010.
- 90. Tabaee A, Nyquist G, Anand VK, Singh A, **Schwartz TH** Palliative endoscopic surgery in advanced sinonasal and anterior skull base neoplasms. <u>Otolaryngology and Head and Neck Surgery</u> 142;1:126-8, 2010.
- 91. Hofstetter CP, Singh A, Anand VK, **Schwartz TH**. Endoscopic transpterygoidal approach to the pterygopalatine fossa, petrous apex, lateral sphenoid sinus and Meckel's cave. <u>Journal of Neurosurgery</u> 113;5:967-74, 2010.
- 92, Plakantonakis D, Shariff S, Lafaille F, Labar D, Harden C, Hosain S, Kandula P, Schaul N, Kolesnik D, **Schwartz TH**. Bilateral electrodes for lateralizing epilepsy: efficacy, risk and outcome. Neurosurgery 55;2:274-283, 2010.
- 93. Nyquist GG, Anand VK, Mehara S, Kacker A, **Schwartz TH.** Endoscopic repair of anterior skull base non-traumatic cerebrospinal fluid leaks, meningoceles and encephaloceles. <u>J. Neurosurgery</u> 112:1070-1077, 2010.
- 94. Roth J, Singh A, Nyquist G, Fraser JF, Benardo A, Anand VK, **Schwartz TH**. Comparison of expanded endonasal and trancranial approaches to the midline skull base using standard two dimensional and novel three-dimensional endoscope. <u>Neurosurgery</u> 65;6:1116-1129, 2009.

- 95. Fiebelkorn IC, Foxe JJ, **Schwartz TH**, Molholm S. Staying within the lines: Does the formation of visual boundaries influence multisensory feature integration? <u>Eur. J. Neurosci.</u> 31:1737-43, 2010.
- 96. Placantonakis DG, **Schwartz TH**. Localization in epilepsy. <u>Neurol Clin.</u> 27;4:1015-30, 2009.
- 97. Nyquist GG, Anand VK, Singh A, Tabaee A, **Schwartz TH.** The Janus flap. The bilateral nasoseptal flap for anterior skull base reconstruction. <u>Oto Head Neck Surg</u> 142:327-331, 2010.
- 98. Greenfield JG, Kacker A, Brown Tabaee A, Anand VK, **Schwartz TH**. Endoscopic, endonasal, transethmoidal, transcribriform, transfovea ethmoidalis approach to the anterior skull base and anterior cranial fossa. <u>Neurosurgery</u> 62:5:883-892, 2010.
- 99. Cox M, Ma H, Bahlke ME Beck JH, **Schwartz TH**, Kymissis I. LED-based optical device for chronic in vivo perfusion measurement. <u>IEEE</u> 5;1:174-177, 2010.
- 100. Schaberg MR, Anand VK, **Schwartz TH**, Cobb W. Microscopic versus endoscopic transnasal pituitary surgery. <u>Cur Opin Oto Head Neck Surg</u> 18;1:8-14, 2010.
- 101. Fraser JF, Nyquist GG, Moore N, Anand VK, **Schwartz TH.** Endoscopic endonasal minimal access approach to the clivus: case series and technical nuances. <u>Neurosurgery</u> 66 (ONS Suppl 1):ONS150-158, 2010.
- 102. Nyquist GG, Anand VK, Brown S, Singh A, Tabaee A, **Schwartz TH.** Middle turbinate preservation in endoscopic transsphenoidal surgery of the anterior skull base. <u>Skull Base</u> 20;5:343-347, 2010.
- 103. Cobb W, Makosch G, Anand VK, **Schwartz TH**. Endoscopic transsphenoidal, transclival resection of an enterogenous cyst located ventral to the brainstem. <u>Neurosurgery</u> 67 (ONS Suppl 2): 0NS518-519, 2010.
- 104. Kasliwal MK, Greenfield JG, **Schwartz TH**. Simultaneous middle fossa arachnoid cyst and ambient cistern epidermoid cyst: Case report and endoscope-assisted microsurgical management. <u>Pediatric Neurosurgery</u> 46;2:151-4, 2010.

- 105. Wernicke AG, Sherr DL, **Schwartz TH**, Pannullo SC, Stieg PE, Boockvar JA, Ivanidze J, Moliterno JA, Parashar B, Trichter S, Sabbas AM, Nori D. Feasibility and safety of GliaSite brachytherapy in treatment of CNS tumors following neurosurgical resection. <u>J Cancer Res Ther</u> 6;1:65-74, 2010.
- 106. Schaberg M, Anand V, **Schwartz TH**. 10 Pearls for safe endoscopic skull base surgery. Oto Clin North Am 43:945-953, 2010.
- 107. Kasliwal MK, Anand VK, Lavi E, **Schwartz TH**. Endoscopic management of a rare case of nasal glioma in Meckel's case in an adult: report of a case. <u>Min Invas Neurosurg</u> 53:191-193, 2010.
- 108. Katzen H, Ravdin LD, Assuras S, Heros R, Kaplitt M, **Schwartz TH**, Fink M, Levin BE, Relkin NR. Post-shunt cognitive and functional improvement in idiopathic normal pressure hydrocephalus (NPH). Neurosurgery 68;2:416-9, 2011.
- 109. Boockvar JA, Tsouris AJ, Hofstette CH, Kovanlikaya I,Fralin S, Kesavabhotia K, Seedial SM, Pannullo S, **Schwartz TH,** Stieg PE, Zimmerman R, Knopman J, Scheff RJ, Christos P, Vallabhajosla S, Riina HA. Safety and maximum tolerated dose of superselective intraarterial cerebral infusion of bevacizumab after osmotic blood brain barrier disruption for recurrent malignant glioma. <u>J. Neuosurg.</u> 114;3:624-32, 2010.
- 110. Hofstetter C, Mannah RM, Mubita L, Anand VK, Dehdashti A, **Schwartz TH**. Endoscopic endonasal approach for growth-hormone secreting pituitary adenomas. Neurosurgical Focus 29;4:E6, 2010.
- Sampson JH, Archer G, Pedain C, Wembacher-Schröder E, Westphal M, Kunwar S, Vogelbaum MA, Coan A, Herndon JE, Raghavan R, Brady ML, Reardon DA, Friedman AH, Friedman HS, Rodríguez-Ponce MI, Chang SM, Mittermeyer S, Croteau D, Puri RK, Markert JM, Prados M, Chen T, Mamelak A, Cloughesy T, Yu J, Lillehei K, Piepmeier J, Pan E, Vrionis F, Olson J, Chandler J, Paleologos N, Byrne RW, Lesniak M, Weingart JD, Black P, Mikkelsen T, Uhm J, Bucholz R, Abrey L, Schwartz TH, Bruce J, Asher A, Sampson J, Tatter S, Barnett G, Chiocca AE, Delashaw JB Jr, Judy K, Patel S, Frankel B, Lang F, New P, Fink K, Jensen RL, Shaffrey M, Taylor L, Boling W, Badie B, Guha A, Mehta V, Hamilton M, Eisenstat DD, Pirouzmand F, Macdonald D, Del Maestro R, Fourney D, Westphal M, Mehdorn M, Goldbrunner R, Schackert G, Unterberg A, Ram Z, Cohen Z, Rappaport Z, Mooij JJ, Wolbers JG, Warnke P, Papanastassiou V. Poor drug distribution as a possible explanation for the results of the PRECISE trial. J Neurosurg. 113;2:301-9, 2010.
- 112. Butler JS, Mulholm S, Fiebelkorn IC, Mercier M, **Schwartz TH**, Foxe JJ. Common or redundant neural circuits for duration processing across audition and touch. J. Neurosci, 31;9:3400-6, 2011.
- 113. Hofstetter C, Shin BJ, Mubita L, Huang C, Anand VK, Boockvar JA, **Schwartz TH.** Endoscopic endonasal surgery for functional pituitary adenomas. <u>Neurosurgical Focus</u> 30;4:E10, 2011.

- 114. Roth J, Fraser J, Singh A, Benardo A, Anand VK, Schwartz TH. Surgical approaches to the orbital apex: Comparison of endoscopic endonasal and transcranial approaches using a novel 3D endoscope. <u>Orbit</u> 30;1:43-48, 2011.
- 115. Garcia-Navarro V, Anand VK, **Schwartz TH**. Use of a side-cutting aspiration device for resection of tumors during endoscopic endonasal approaches. Technical Note.

 Neurosurgical Focus 30;4:E13, 2011.
- 116. Geneslaw A, Zhao M, Ma H, **Schwartz TH.** Tissue hypoxia during interictal spikes correlates with intensity of epileptic activity. <u>J Cereb Blood Flow Metab</u> 31;6. 1394-402, 2011.
- 117. Komotar RJ, Starke RM, Raper DMS, Anand VK, **Schwartz TH.** The endoscope-assisted ventral approach compared with open microscope-assisted surgery for clival chordomas: a systematic review <u>World Neurosurgery</u> 76;3-4:318-27, 2011.
- 118. Luther N, Rubens E, Sethi N, Kandula P, Labar DR, Harden C, Perrine K, Christos PJ, Schaul NS, Kolesnik DV, Nouri S, Dawson A, Tsouris AJ, **Schwartz TH.** Can acute electrocorticography obviate the need for chronic implantation of electrodes and predict outcome in a subgroup of patients with temporal lobe epilepsy and a normal MRI? Epilepsia 52;5:941-8, 2011.
- 119. Nguyen J, Ferdman J, Zhao M, Huland D, Saqqa S, Ma J, Nishimura N, **Schwartz TH**, Schaffer CB. Sub-surface micrometer-scale incisions produced in rodent cortex using tightly-focused femtosecond laser pulses. <u>Lasers in Surg and Med</u> 43:382-291, 2011
- 120. Morgenstern PF, Osburn N, **Schwartz TH,** Greenfield JP, Tsouris AJ, Souweidane MM. Pineal region tumors: an optimal trajectory for simultaneous endoscopic third ventriculostomy and biopsy. <u>Neurosurgical Focus</u> 30;4:E3, 2011.
- 121. Leng L, Greenfield JP, Souweidane MM, Anand VK, **Schwartz TH**. Endonasal endoscopic resection of craniopharyngiomas. Analysis of outcome measures including extent of resection, CSF leak, return to productivity and body mass index. <u>Neurosurgery</u> 70;1:110-123, 2012.
- 122. Komotar RJ, Starke RM, Raper DMS, Anand VK, **Schwartz TH**. Endoscopic endonasal versus open transcranial resection of anterior skull base meningiomas: a systematic meta-analysis of outcomes. <u>World Neurosurgery</u> 77;5/6:713-724, 2012.
- 123. Komotar RJ, Starke RM, Raper DMS, Anand VK, **Schwartz TH**. Endoscopic versus transsphenoidal microscopic and transcranial resection of craniopharyngiomas: a systematic meta-analysis of outcomes. <u>World Neurosurgery</u> 77;2:329-41, 2012
- 124. Liotta D, Kacker A, Schwartz TH, Anand VK. Endoscopic management of juvenile nasopharyngeal angiofibromas. <u>Op. Tech.Otol-Head Neck Surg.</u> 22;4:281-284, 2011.

- 125. De la Cruz E, Zhao M, Guo L, Ma H, **Schwartz TH**, Anderson S. Interneuron progenitor transplants attenuate the propagation of acute focal seizures in mouse neocortex.

 Neurotherapeutics 8;4:763-73, 2011.
- 126. Gomez-Ramirez M, Kelly SP, Molholm S, Sehatpur P, **Schwartz TH,** Foxe JJ. Oscillatory sensory selection mechanisms mediate intersensory attention to rhythmic auditory and visual input: a human electro-corticographic (ECoG) investigation <u>J. Neuroscience</u> 31;50:18556-67, 2011.
- 127. Garcia-Navarro V, Anand VK, **Schwartz TH.** The "Gasket-Seal" closure for extended endonasal endoscopic skull base surgery. Long-term efficacy in a large case series. <u>World Neurosurgery</u> 80;5:563-8, 2013.
- 128. **Schwartz TH,** Seung-Bong H, Bagshaw AP, Chauvel P, Benar C-G. Preictal changes in cerebral haemodynamics: review of findings and insights from intracerebral EEG. <u>Epilepsy Research</u> 97;3:252-66, 2011.
- 129. Zhao M, Nguyen J, Ma, H, Mozomi N, Schaffer CB, **Schwartz TH.** Pre-ictal and ictal neurovascular and metabolic coupling surrounding an ictal focus. <u>J. Neurosci</u> 31;37:13292-300, 2011.
- 130. Hofstetter CP, Nanszko M, Mubita L, Tsouris J, Anand VK, **Schwartz TH**. Volumetric classification for giant pituitary macroadenomas predicts outcome and morbidity of endoscopic endonasal transsphenoidal surgery <u>Pituitary</u> 15(3):450-63, 2011.
- Wang J, Yeager A, **Schwartz TH,** Westrich GH. Massive spontaneous acute-on-chronic subdural hematoma following coumadin administration. A case report. <u>JBJS Case Connect.</u> 1(2):e12, 2011.
- 132. McCoul ED, Anand VK, Bedrosian JR, **Schwartz TH.** Endoscopic skull base surgery and its impact on sinonasal-related quality of life. <u>Int Forum All Rhin</u> 2(2):174-81, 2012
- 133. Nyquist GG, Anand VK, **Schwartz TH**. Endsocopic management of cerebrospinal fluid rhinorrhea Op. Tech. Otol-Head Neck Surg. 22;3:229-231, 2011.
- Leng L, Anand VK, Schwartz TH. Endoscopic resection of craniopharyngomas <u>Op.</u>
 <u>Tech. Otol-Head Neck Surg.</u> <u>Surgery</u> 22;3:215-222, 2011.
- 135. Singh A, Wesell A, Anand VK, **Schwartz TH**. Surgical anatomy and physiology for the skull base surgeon Op. Tech. Otol-Head Neck Surg. 22;3:184-193, 2011.
- 136. Hofstetter, Anand VK, **Schwartz TH**. Endoscopic resection of pituitary adenomas <u>Op.</u> <u>Tech. Otol-Head Neck Surg.</u> 22;3:206-214, 2011.

- 137. McCoul ED, **Schwartz TH,** Anand VK. Vascularized reconstruction of endoscopic skull base defects Op. Tech. Otol-Head Neck Surg. 22;3:232-236, 2011.
- 137. McCoul E, Chow S, Lee D, Anand VK, **Schwartz TH**. Endoscopic endonasal resection of ventral skull base keratinaceous cysts. <u>Int Forum All Rhin</u> 2(3):258-63, 2012.
- 138. Anand VK, Schwartz TH, McCoul ED. Extended endoscopic skull base techniques. <u>Op. Tech. Otol-Head Neck Surg.</u> 22;4:253, 2011.
- 139. Woodworth GF, McCoul ED, Greenfield JG, Anand VK, **Schwartz TH**. Endoscopic management of anterior cranial fossa meningiomas <u>Op. Tech.Otol-Head Neck Surg.</u> 22;4:254-263, 2011.
- 140. McCoul ED, **Schwartz TH,** Anand VK. Endoscopic approach to the infratemporal fossa Op. Tech. Otol-Head Neck Surg. 22;4:285-290, 2011.
- 141. McCoul ED, Anand VK, **Schwartz TH**. Endoscopic approaches to the cavernous sinus Op. Tech. Otol-Head Neck Surg. 22;4:263-269, 2011.
- 142. Raper DMS, Komotar RJ, Starke RM, Anand VK, **Schwartz TH**. Endoscopic versus open approaches to the skull base: a comprehensive literature review. <u>Op. Tech.Otol-Head Neck Surg.</u> 22;4:302-307, 2011.
- 143. Attia M, Kandasamy J, Jakimovsky D, Bedrosian J, Alimi M, Anand VK, **Schwartz TH**. The importance and timing of optic canal exploration and decompression during endonasal resection of tuberculum sella and planum sphenoidale meningiomas. <u>Operative Neurosurgery</u> 71(1 Suppl Operative):58-67, 2012.
- 144. Komotar RJ, Starke RM, Raper DMS, Anand VK, **Schwartz TH**. Endoscopic endonasal compared with microscopic transsphenoidal and open transcranial resection of giant pituitary adenomas: a systematic review of outcomes. <u>Pitutiary</u> 15(2):150-9, 2012.
- 145. McCoul ED, Anand VK, **Schwartz TH.** Significant improvements in health-related quality of life after endoscopic anterior skull base surgery. A prospective study. <u>J. Neurosurgery</u> 117:498-506, 2012.
- 146. Stessin AM, Schwartz A, Judanin G, Pannullo SC, Boockvar JA, **Schwartz TH,** Steig PE, Wernicke AG. Does adjuvant external beam radiotherapy improve outcome for non-benign meningiomas? A surveillance epidemiology and end results (SEER)-based analysis. <u>J. Neurosurgery</u> 117(4):669-75, 2012.

- 147. Komotar RJ, Starke RM, Raper DMS, Anand VK, **Schwartz TH**. Endoscopic endoscopic skull base surgery: a comprehensive comparison with open transcranial approaches. <u>Brit. J. Neurosurg.</u> 26(5):637-48, 2012.
- 148. Raithatha R, McCoul ED, Woodworth GF, **Schwartz TH**, Anand VK. Endoscopic endonasal approaches to the cavernous sinus. <u>Int Forum Allergy Rhinol</u>. 2(1):9-15, 2012.
- 149. McCrea HJ, Knopman J, Engel M, Riina H, Souweidane M, **Schwartz TH**, Greenfield JP. Concurrent anatomic hemispherectomy and thalamic artriovenous malformation resection. <u>Childs Nerv Syst.</u> 28(8):1273-7, 2012.
- 150. Lee DLY, McCoul ED, Anand VK, **Schwartz TH**. Endoscopic endonasal access to the jugular foramen: defining the surgical approach. J Neurological Surgery-Part B 73;352-341, 2012.
- 151. Bedrosian JC, Garcia-Navarro V, McCoul ED, Anand VK, **Schwartz TH.** Endoscopic balloon dilatation as an adjunct to extended endoscopic approaches to the skull base. <u>J. Neurosurg.</u> 116(6):1215-8, 2012.
- 152. Ma H, **Schwartz TH**. Dynamic neurovascular coupling and uncoupling during ictal onset, propagation and termination revealed by simultaneous in vivo optical imaging of neural activity and local blood volume. <u>Cerebral Cortex</u> 23;4:889-95, 2013.
- 153. Silva D, Attia M, Kandasamy J, Alimi M, Anand VK, **Schwartz TH.** Endoscopic endonasal posterior clinoidectomy. A technical note. <u>Surg. Neurol Internatl.</u> 3:64, 2012.
- 154. Mercier MR, Foxe JJ, Fiebelkorn IC, Butler JS, **Schwartz TH**, Molholm S. Auditory driven phase reset in human visual cortices: a mechanism for early multisensory integration. <u>NeuroImage</u> 79:19-29, 2013.
- 155. Dias L, Gebhard H Mtui EP, Anand V, **Schwartz TH.** The use of a ultraportable "USB" endoscope for education and training in neuroendoscopy. <u>World Neurosurgery</u> 79(2):337-40, 2013.
- 156. Komotar RJ, Starke RM, Raper DM, Anand VK, **Schwartz TH**. Endoscopic endonasal versus open repair of anterior skull base CSF leak, meningocele and encephalocele. A systematic review of outcomes. <u>Journal of Neurological Surgery Part A. Central European Neurosurgery</u> 74(4):239-50, 2013.
- 157. McCoul ED, Anand VK, **Schwartz TH.** Long-term effectiveness of a reconstruction protocol using the nasoseptal flap after endoscopic skull base surgery. <u>World Neurosurgery</u> 81;1:136-143, 2014.
- 158. Silva D, Attia M, Kandasamy J, Alimi M, Anand VK, **Schwartz TH.** The endoscopic endonasal transsphenoidal "above and below" approach to the retroinfundibular area and interpeduncular cistern cadaveric study and case illustrations. <u>World Neurosurgery</u> 81;2:374-384, 2014.

- 159. Lancman G, Virk M, Shao H, Madhu M, Greenfield GP, Weinstein S, **Schwartz TH.** Vagal nerve stimulation versus corpus callosotomy in the treatment of Lennox-Gastaut Syndrome: a meta-analysis. <u>Seizure</u> 22(1):3-8, 2013.
- 160. Attia M, Patel KS, Kandasamy J, Steig PE, Spinelli HM, Riina HA, Anand VK, **Schwartz TH.** Combined cranionasal surgery for spheno-orbital meningiomas invading the paranasal sinuses, pterygopalatine and infratemporal fossa. <u>World Neurosurgery</u> 80;6:e367-73, 2013.
- 161. Bedrosian JC, Raithatha R, McCoul ED, Akselrod O, Anand VK, **Schwartz TH.** A prospective study of post-operative symptoms in sinonasal quality-of-life following endoscopic skull base surgery: dissociations based on specific symptoms. <u>Int Forum Allergy Rhinol</u> 3(8):664-9, 2013.
- 162. Komotar RJ, Starke RM, Raper DMS, Anand VK, **Schwartz TH**. Endoscopic endonasal versus open craniofacial resection of esthesioneuroblastoma <u>World Neurosurgery</u> 80;1-2:148-59, 2013.
- 163. Labar D, Dakov P, Kobylarz E, Nikolov B, **Schwartz TH.** Effects of responsive electrical brain stimulation on intracranial electroencephalogram spikes. <u>Neuromodulation</u> 6;4:355-62, 2013.
- 164. Patel KS, Zhao M, Ma H, **Schwartz TH.** Imaging pre-ictal hemodynamic changes in neocortical epilepsy. <u>Neurosurgical Focus</u> 34;4:E10, 2013.
- 165. Hersh EA, Virk MV, Shao H, Tsouris AJ, Bonci GA, **Schwartz TH**. Bone flap explantation, steroid use and rates of infection during craniotomy for implantation of sudural eledtrodes for epilepsy. <u>J. Neurosurgery</u> 119(1):48-53, 2013.
- 166. Patel KS, Moussazadeh N, Doyle WK, Labar DR, **Schwartz TH.** Efficacy of vagus nerve stimulation in brain tumor-associated intractable epilepsy and the importance of tumor stability. <u>J. Neurosurgery</u> 119(2):520-5, 2013.
- 167. Mascarenhas L, Moshel YA, Bayad F, Szentermai O, Salek AA, Leng LZ, Hofstetter CP, Placantonakis DG, Tsouris AJ, Anand VK, **Schwartz TH**. The transplanum transtuberculum approaches for suprasellar and sellar-suprasellar lesions. Avoidance of CSF leak and lessons learned. World Neurosurgery 82 (1/2): 186-95, 2014.
- 168. Patel KS, Komotar R, Szentirmai O, Moussazadeh N, Raper DM, Starke RM, Anand VK, **Schwartz TH.** Case-specific protocol to reduce CSF leakage after endonasal endoscopic surgery. J. Neurosurgery 119;3:661-8.2013.
- 169. Rajappa P, Margetis K, Sigounas D, Anand VK, **Schwartz TH**, Greenfield JG. Case report: endoscopic endonasal trans-clival approach to a ventral pontine pediatric ependymoma. <u>J. Neurosurgery Peds</u> 12;5:465-8, 2013.
- 170. Rajappa P, Margetis K, Wernicke G, Ginter P, Cope W, Sherr DL, Lavi E, Fine RL, **Schwartz TH,** Bruckner H, Pannullo SC. Stereotactic radiosurgery plays a critical role in

- enhancing long-term survival in a patient with pancreatic cancer metastatic to the brain. Anticancer Res. 33(9):3899-903, 2013.
- 171. Patel KS, Labar DR, Gordon CM, Hassnain KH, **Schwartz TH.** Efficacy of vagus nerve stimulation as a treatment for medically intractable epilepsy in brain tumor patients. A case-controlled study using the VNS therapy Patient Outcome Registry. <u>Seizure:</u> European Journal of Epilepsy 22;8:627-33, 2013.
- 172. Mulholm S, Mercier MR, Liebenthal E, **Schwartz TH**, Ritter W, Foxe JJ, De Sanctis P. Mapping phonemic processing zones along human perisylvian cortex: an electrocorticographic investigation. Brain Structure and Function 219;4:1369-83, 2014.
- 173. Harris S, Bruyns-Haylett M, Kennerley A, Boorman L, Overton P, Ma H, Zhao M, **Schwartz TH**, Berwick J. The effects of focal epileptic activity on regional sensory-evoked neurovascular coupling and post-ictal modulation of bilateral sensory processing. <u>Journal of Cerebral Blood Flow and Metabolism</u> 33;10:1595-604, 2013.
- 174. Jakimovski D, Attia M, Bonci G, Hofstetter C, Tsouris AJ, Anand VK, **Schwartz TH.** Incidence and significance of intraoperative CSF leak in endoscopic pituitary surgery using intrathecal fluorescein. <u>World Neurosurgey</u> 8;3-4; 513-23, 2014.
- 175. Komotar RJ, Starke RM, Raper DMS, Anand VK, **Schwartz TH**. Endonasal versus transoral odontoid resection: systematic meta-analysis of outcomes. <u>Innovative Neurosurgery</u> 1;1:37-47, 2013.
- 176. Kulwin C, **Schwartz TH,** Cohen-Gadol AA. Endoscopic extended transsphenoidal resection of tuberculum sella meningiomas: nuances of neurosurgical technique Neurosurgery Focus 35;6:E6, 2013.
- 177. Khan OH, Raithatha R, Anand VK, **Schwartz TH.** Choosing the best approach in 3D endoscopic skull base surgery. <u>Otolaryngologia</u> 63;137-143, 2013.
- 178. Ottenhausen M, Banu M, Placantonakis DG, Tsiouris AJ, Khan OH, Anand VK, **Schwartz TH.** Endoscopic endonasal resection of suprasellar meningiomas: the importance of case selection and experience in determining extent of resection, visual improvement and complications <u>World Neurosurgery</u> 83;3/4:442-449, 2014.
- 179. Banu MA, Shin BJ, Kim JH, Woodworth GF, Bedrosian JC, Anand VK, **Schwartz TH.** Low-dose intrathecal fluorescein and etiology-based graft choice in endoscopic endonasal closure CSF leaks. Clinical Neurology and Neurosurgery 116:28-34, 2014.
- 180. Banu MA, Rathman A, Souweidane MM, Anand VK, Greenfield JP, **Schwartz TH.** Corridor-based endonasal endoscopic skull base surgery for pediatric skull base surgery with detailed radioanatomic measurements. Operative Neurosurgery 10;2:273-293, 2014.

- 181. Banu MA, Guerrero A, Rathman A, Souweidane MM, Anand VK, Heier L, **Schwartz TH,** Greenfield JP. Impact of skull base development on endonasal endoscopic surgical corridors. Clinical article. <u>Journal of Neurosurgery Pediatrics</u> 13;2:155-69, 2014.
- 182. Jo A, Heo C, **Schwartz TH**, Suh M. Nanoscale intracortical iron injection-induced chronic rodent epilepsy alters neurovascular coupling through a reduction in GABAergic interneurons. <u>Journal of Neuroscience Research</u> 92;3:389-97, 2014.
- 183. Bahramisharif A, van Gerven M, Aarnoutse E, Mercier M, **Schwartz TH**, Foxe J, Ramsey NF, Jensen O. Propagating neocortical gamma bursts are coordinated by traveling alpha waves. <u>Journal of Neuroscience</u> 33;48:18849-54. 2013.
- 184. Tebo CC, Evins AI, Christos PJ, Kwon J, **Schwartz TH.** Evolution of cranial epilepsy surgery complication rates: a 32-year systematic review and meta-analysis. <u>Journal of Neurosurgery</u> 120:6;1415-2, 2014.
- 185. Woodworth GF, Patel KS, Shin B, Burkhardt J-K, Tsouris AJ, McCoul ED, Anand VK, **Schwartz TH.** Surgical outcomes using a medial-to-lateral endonasal endoscopic approach to pituitary adenomas invading the cavernous sinus. <u>Journal of Neurosurgery</u> 120:5;1086-94, 2014.
- 186. Patel KA, Goldenberg B, **Schwartz TH.** Betadine irrigation and post-craniotomy wound infection. <u>Clinical Neurology and Neurosurgery</u> 118:49-52, 2014.
- 187. Rapoport BI, Hartl R, **Schwartz TH.** Cranial neuropathy due to intradural disc herniation. <u>Neurosurgery</u> 74:5;E561-5, 2014.
- 188. Alonso LM, Proekt A, **Schwartz TH,** Pryor KO, Cecchi GA, Magnasco MO. Dynamic criticality during induction of anesthesia in human ECoG recordings. Frontiers in Neuroscience 25;8:20, 2014.
- 189. Banu MA, Szentirmai O, Mascarenhas L, Al Amin S, Anand VK, **Schwartz TH.** Pneumocephalus patterns following endonasal endoscopic skull base surgery as predictors of post-operative CSF leak. <u>Journal of Neurosurgery</u> 4:1-15, 2014.
- 190. Bedrosian J, Anand VK, **Schwartz TH.** The endoscopic endonasal approaches for iatrogenic and non-iatrogenic csf leaks and encephaloceles of the anterior cranial fossa. World Neurosurgery 82;6S:S86-S94, 2014.
- 191. Sekhar L, Mantovani A, Mortazavi M, **Schwartz TH,** Couldwell WT. Open vs. endoscopic: when to use which? <u>Clinical Neurosurgery</u> 61;1:84-92, 2014.

- 192. Goldschlager T, Hartl R, Greenfield JP, Anand VK, **Schwartz TH.** The endoscopic endonasal approach to the odontoid and its impact on early extubation and feeding <u>Journal of Neurosurgery</u> 122;3:511-8, 2015.
- 193. Wernicke AG, Yondorf MZ, Peng L, Trichter S, Nedialkova L, Sabbas A, Kulidzhanov F, Parashar B, Nori D, Clifford Chao KS, Christos P, Kovanlikaya I, Pannullo S, Boockvar JA, Stieg PE, **Schwartz TH.** Phase I/II study of resection and intraoperative cesium-131 radioisotope brachytherapy in patients with newly diagnosed brain metastases. <u>Journal of Neurosurgery</u> 121;2:338-48, 2014
- 194. Harris S, Ma H, Zhao M, Boorman L, Zheng Y, Kennerley A, Bruyns-Haylett M, Overton PG, Berwick J, **Schwartz TH**. Coupling between gamma-band power and cerebral blood volume during recurrent acute neocortical seizures. <u>NeuroImage</u> 15;97:62-70, 2014.
- 195. Margetis K, Rajappa P, Tsiouris AJ, Greenfield JP, **Schwartz TH.** Intraoperative stereotactic injection of Indigo Carmine dye to mark ill-defined tumor margins. A prospective phase 1-2 study. <u>Journal of Neurosurgery</u> 122;1:40-8, 2015.
- 196. Harris S, Boorman L, Bruyns-Haylett M, Kennerley A, Overton PG, Ma H, Zhao M, **Schwartz TH,** Berwick J. Contralateral dissociation between neural activity and cerebral blood volume during recurrent focal neocortical seizures. <u>Epilepsia</u> 55;9:1423-30, 2014.
- 197. Golas AR, Boyko T, Boockvar JA, **Schwartz TH,** Stieg PE, Spector JA. Prophylactic plastic surgery closure of neurosurgical scalp incisions reduces the incidence of wound complciations in previously-opeated patients treated with bevicizumab (Avastin) and radiation J. <u>Neuro-Oncology</u> 119;2:327-31, 2014.
- 198. Ma H, Harris S, Rahmani R, Lacefield C, Zhao M, Daniel AS, Shou Z, Bruno R, Berwick J, **Schwartz TH.** Wide-field *in vivo* neocortical calcium dye imaging using a novel convection-enhanced loading technique combined with simultaneous multi-wavelength imaging off voltage sensitive dyes and hemodynamic signals. Neurophotonics 1;1:015003, 2014.
- 199. Khan OH, Anand VK, **Schwartz TH.** Endoscopic endonasal resection of skull base meningiomas: the significance of a "cortical cuff" and brain edema compared with surgical experience and case selection in predicting morbidity and extent of resection Neurosurgical Focus 37;4:E7, 2014.
- 200. Patel KA, Kazam J, Tsiouris AJ, **Schwartz TH.** Utility of early post-operative high resolution volumetric MR imaging after transsphenoidal pituitary tumor surgery. <u>World Neurosurgery</u> 82;5:777-80, 2014.
- 201. Yang T, Hakimian S., **Schwartz TH.** Intraoperative ECoG. <u>Epileptic Disorders</u> 16;3:271-9, 2014.

- 202. Conger AR, Lucas J, Zada G, **Schwartz TH,** Cohen-Gadol AA. Endoscopic extended transsphenoidal resection of craniopharyngiomas: Nuances of neurosurgical technique Neurosurgical Focus 37;4:E10, 2014.
- 203. Moussazadeh N, Culwin C, Iorgulescu B, Ting J, Cohen-Gadol A, **Schwartz TH.** Endoscopic endonasal resection of skull base chondrosarcomas. <u>Journal of Neurosurgery</u> 122;4:735-42, 2015.
- 204. Raza S, Donaldson. A, Mehta A, Tsiouris AJ, Anand VK, **Schwartz TH.** The surgical management of trigeminal schwannomas. Defining the role for endonasal endoscopic approach. <u>Neurosurgical Focus</u> 37;4:E17, 2014.
- 205. Rahmani R, Sukumaran, Lavi E, **Schwartz TH**. Parasellar xanthogranulomas. <u>Journal of Neurosurgery</u> 122;4:812-7, 2015.
- McCoul ED, Bedrosian JC, Akselrod O, Anand VK, Schwartz TH. Improvements in multidimensional quality-of-life after endoscopic pituitary adenoma resection. <u>Journal of Neurosurgery</u> 123;3:813-20, 2015.
- Patel KS, Raza SM, McCoul ED, Patrona A, Anand VK, Schwartz TH. Long-term quality of life after endonasal endoscopic resection of adult craniopharyngiomas. <u>Journal</u> <u>of Neurosurgery</u> 123;3:571-80, 2015.
- 208. Raza SM, Banu MA, Patel KS, Anand VK, **Schwartz TH.** Sensitivity and specificity of intrathecal fluorescein and white light excitation for intra-operative cerebrospinal fluid leak in endoscopic skull base surgery. A prospective study. <u>Journal of Neurosurgery</u> 124;3:621-6, 2015.
- 209. Ye J, Yondorf M, Pannullo SC, Boockvar JA, Steig PE, Schwartz TH, Scheff RJ, Parashar B, Nori D, Chao KSC, Wernicke AG. Hypofractionated radiotherapy with concurrent temozolomide chemotherapy in patients with newly diagnosed RPA class V glioblastoma multiforme: promising early results <u>Journal of Radiation Oncology</u> 4;1:19-27, 2015.
- 210. Zhao M, McGarry LM, Ma H, Harris S, Harris S, Berwick J, Yuste R, **Schwartz TH.** Triggering seizures with caged rubi-4-aminopyridine <u>Frontiers in Neuroscience</u> 4;9:25, 2015.
- 211. Cappabianca P, **Schwartz TH,** Jane JJ, Zada G. Introduction. Endoscopic endonasal skull base surgery. <u>Neurosurgical Focus</u> 37;4:2014.

- 212. Szentirmai O, Hong Y, Mascarenhas L, Salek AA, Steig PE, Anand VK, Cohen-Gadol AA, **Schwartz TH.** Endonasal clip ligation of cerebral aneurysms: an anatomic feasibility study and future directions. <u>Journal of Neurosurgery</u> 124;2:463-468, 2016.
- 213. Banu MA, Ottenhausen M, Mehta A, Szentirmai O, Patel KS, Fraser JF, Tsiouris JA, Anand VK, **Schwartz TH.** Endoscopic-assisted endonasal versus supraciliary keyhole resection of olfactory groove meningiomas: comparison and combination of two minimally invasive approaches <u>Journal of Neurosurgery</u> 124;3:605-20, 2016.
- 214. Berastegui GRA, Raza SM, Anand VK, **Schwartz TH.** Endonasal endoscopic transsphenoidal chiasmapexy using a clival cranial base cranioplasty for visual loss from massive empty sella following macroprolactinoma treatment with bromocriptine: case report and literature review <u>Journal of Neurosurgery</u> 124;4:1025-1031, 2016.
- 215. Dziedzic T, Anand VK, **Schwartz TH**. Endoscopic endonasal approach to the lateral orbital apex. Case report. <u>Journal of Neurosurgery Pediatrics</u> 16;3:305-8, 2015.
- 216. Hsu A, Singh A, Bury S, **Schwartz TH**, Anand V, Kacker A. Endoscopic cerebrospinal fluid leak closure in an infected field <u>All & Rhin</u>. 29;4:305-8, 2015.
- 217. Jaiswal MJ, Keros S, Zhao M Inan M, **Schwartz TH**, Anderson SA, Homanics GE, Goldstein PA. Seizure-reduction following transplantation of MGE interneurons requires expression of the GABA_A receptor α4 subunit. <u>Frontiers in Neuroscience</u> 4;9:127, 2015.
- 218. Bander ED, Kovanlikaya I, **Schwartz TH.** Utility of tubular retractors to minimize post-operative FLAIR and diffusion signal in the brain in the removal of deep intraparenchymal lesions. <u>Journal of Neurosurgery</u> 124;4:1053-1060, 2016.
- 219. Mercier M, Mulholm S, Fiebelkorn I, Butler J, **Schwartz TH,** Foxe J. Neuro-oscillatory phase alignment drives speeded multisensory response times: an electro-corticographic (ECoG) investigation. Journal of Neuroscience 35;22:8546-57, 2015.
- 220. Daniel, AGS, Ma H, Laffont P, Zhao M, **Schwartz TH.** Optical electrocorticogram (OECoG) using wide-field calcium imaging reveals the divergence of neuronal and glial activity during acute rodent seizures. <u>Epilepsy and Behavior</u> 49:61-5, 2015.
- 221. La Corte E, Aldana PR, Ferroli P, Greenfield JP, Hartl R, Anand VK, **Schwartz TH.** The rhinopalatine line as a reliable predictor tool in the preoperative planning of endonasal odontoidectomies. <u>Neurosurg Focus.</u> 38;4:E16, 2015.
- 222. Cotter DJ, Woodworth G, Gupta SV, Manandhar P, **Schwartz TH**. Infrared thermal imaging during ultrasonic aspiration of bone. <u>Physics Procedia</u> 63;167-176, 2015

- 223. Cornelius NR, **Schwartz TH,** Nishimura N, Doerchuk PC. A mathematical model relating cortical oxygenated and deoxygenated hemoglobin flows and volumes to neuronal activity. <u>Journal of Neural Engineering</u>12;4, 2016.
- 224. McCoul E, Patel A, Bedrosian J Anand VK; **Schwartz TH.** Intranasal cross-sectional area and quality-of-life changes following endoscopic transsphenoidal skull base surgery. <u>International Forum of Allergy & Rhinology</u> 5;12:1124-1130, 2015.
- 225. Zhao M, Alleva R, Ma H, Daniel A, **Schwartz TH**. Optogenetic tools for modulating and probing the epileptic network <u>Epilepsy and Behavior</u> 116:15-26, 2015.
- 226. Zacharia BE, Romero FR, Rapoport SK, Raza SM, Anand VK, **Schwartz TH.** Endoscopic endonasal management of metastatic lesions of the anterior skull base: case series and literature review. World Neurosurgery 84;5:1267-1277, 2016.
- 227. Wernicke AG, Lazow SP, Yondorf MZ, Kovanlikaya I, Nori D, Chao KSC, Christos P, Boockvar JA, Panullo S, Stieg PE, **Schwartz TH**. Surgical technique and clinically relevant resection cavity dynamics following implantation of Cesium-131 (Cs-131) brachytherapy in patients with brain metastases <u>Operative Neurosurgery</u> 12;1:49-60, 2016.
- 228. Wernicke AW, Yondorf MZ, Parashar B, Nori D, Chao KSC, Boockvar JA, Pannullo S, Stieg PE, Schwartz TH. The cost-effectiveness of surgical resection and Cesium-131 intra-operative brachytherapy versus surgical resection and stereotactic radiosurgery in the treatment of metastatic brain tumors. <u>Journal of Neuro-Oncology</u> 127;1:145-154, 2016.
- 229. Yondorf MZ, **Schwartz TH**, Wernicke AW. Radiation exposure and safety precautions following cesium-131 brachytherapy in patients with brain tumors. <u>Health Phys.</u> 112;4:403-408, 2017.
- 230. Prabhu V, Anand VK, **Schwartz TH.** Preservation of pituitary function after endonasal craniopharyngioma surgery. Case report and review of the literature, <u>Cureus</u> 7:8: e305, 2015.
- 231. Khan OH, Raithatha R, Anand VK, **Schwartz TH**. The utility of a Draf III in extending the endonasal endoscopic transethmoidal, transcribriform approach through the back wall of the frontal sinus. <u>World Neurosurgery</u> 85:136-142, 2016.
- 232. Patrona A, Anand VK, **Schwartz TH.** Endoscopic endonasal surgery for non-adenomatous, non-meningeal pathology involving in cavernous sinus. <u>Journal of Neurosurgery</u> 126(3):880-888, 2017.

- 233. Dhandapani SS, Anand VK, **Schwartz TH**. Endonasal endoscopic transsphenoidal resection of tuberculum sella meningioma with anterior cerebral artery encasement. <u>Cureus</u> 7;8:311, 2015.
- 234. Yang T, Bayad F, Schaberg MR, Sigounas D, Nyquist G, Bonci G, Patel K, Tsiouris AJ, Anand VK, **Schwartz TH.** Endoscopic endonasal transsphenoidal treatment of pituitary apoplexy: outcomes in a series of 20 patients. <u>Cureus</u> 7;10:e357, 2015.
- Ottenhausen M, Banu M, Bodhinayake I, Stieg PE, **Schwartz TH.** Vincent du Vignaud: following the sulphur trail to the discovery of the hormones of the posterior pituitary gland at Cornell Medical College. <u>Journal of Neurosurgery</u> 124;5:1538-1542, 2016.
- 236. Romero ADCB, Gangadharan JL, Gobin YP, Anand VK, **Schwartz TH.** Managing arterial injury in endoscopic skull base surgery. Case series and review of the literature. Operative Neurosurgery 13;1:138-149, 2017.
- 237. Pham A, Yondorf MZ, Parashar B, Scheff RJ, Pannullo SC, Ramakrishna R, Steig PE, **Schwartz TH**, Wernicke AG. Neurocognitive function and quality of life in patients with newly diagnosed brain metastases after treatment with intra-operative Cesium-131 brachytherapy: a prospective trial. <u>Journal of Neuro-Oncology</u> 127;1:63-72, 2016.
- 238. McCrea H, George, Settler, **Schwartz TH**, Greenfield JG. Pediatric suprasellar tumors. <u>J. Child Neurology</u> 31;12:1367-1376, 2016.
- 239. Dhandapani S, Singh H, Negm HM, Cohen S, Souweidane MM, Greenfield JP, Anand VK, **Schwartz TH.** Endonasal endoscopic re-operation for residual or recurrent craniopharyngioma. <u>Journal of Neurosurgery</u> 126(2):418-430, 2017.
- Singh H, Essayed WI, Cohen-Gadol A, Zadeh G, Schwartz TH. Resection of pituitary tumors: endoscopic versus microscopic. <u>Journal of Neuro-Oncology</u> 130;2:309-317, 2016.
- 241. Chohan MO, Levin AM, Singh R, Zhou Z, Green CL, Kazam JJ, Tsiouris AJ, **Schwartz TH.** Two-dimensional planar measurements versus three-dimensional volumetric measurements in defining giant adenoma surgery outcomes. <u>Pituitary</u> 19;3:311-321, 2016.
- 242. Wernicke AG, Smith AW, Taube S, Yondorf MZ, Parashar B, Trichter S, Nedialkova L, Sabbas A, Christos P, Ramakrishna R, Pannullo S, Stieg PE, **Schwartz TH.** Cesium-131 brachytherapy for recurrent brain metastases offers durable salvage treatment for previously irradiated patients. Journal of Neurosurgery 126(4):1212-1219, 2017.

- 243. Singh H, Essayed WI, Jada A, Moussazadeh N, Dhandapani SS, Rote S, **Schwartz TH**. Contralateral supraorbital keyhole approach to the medial optic nerve: an anatomicoclinical study. <u>Journal of Neurosurgery</u> 126;3:940-944,2017.
- 244. Inan M, Zhao M, Rajadhyaksha A, Pickel VW, **Schwartz TH**, Goldstein PA, Manfredi G. Energy deficit in parvalbumin neurons leads to circuit dysfunction, impaired sensory gating and social disability. <u>Neurobiology of Disease</u> 93:35-46, 2016.
- 254. Negm H, Anand VK, **Schwartz TH.** Re-operative endoscopic endonasal surgery for recurrent pituitary adenomas after prior transcranial versus prior transsphenoidal surgery. <u>Journal of Neurosurgery</u> 93;35-46, 2016.
- 255. Murray R, Friedlander R, Hanz S, Anand VK, **Schwartz TH** Non-random spatial clustering of spontaneous anterior fossa meningoceles and encephaloceles causing cerebrospinal fluid leak <u>Journal of Neurosurgery</u> 126(5):1720-1724, 2017.
- 256. Zhang M, Singh H, Almadovar G, Anand VK, **Schwartz TH**. Required reading: the most impactful articles in endonasal endoscopic skull base surgery. <u>World Neurosurgery</u> 92;499-512, 2016.
- 257. Jones SH, Iannone AF, Patel KS, Anchouche K, Raza SM, Anand VK, **Schwartz TH.** The impact of age on long term quality of life after endonasal endoscopic resection of skull base meningiomas. <u>Neurosurgery</u> 79;5:736-745, 2016.
- 258. Sonabend AM, Zacharia BE, Cloney MB, Sonabend A, Showers C, Eblana V, Nazarian M, Swanson KR, Baldock A, Brem H, Bruce JN, Buter W, Cahill DP, Carter B, Orringer DW, Sagher O, Sanai N, **Schwartz TH**, Silbergeld DL, Sisti MB, Thompson RC, Waziri AE, McKhann G 2nd. Defining glioblastoma resectability through the wisdom of the crowd: a roof-of-principle study. <u>Neurosurgery</u> 80(4):590-601, 2017.
- 259. Hirschfeld CB, **Schwartz TH**, Wernicke AG. Seed migration to the spinal canal after post-resection brachytherapy to treat a large brain metastasis. <u>Brachytherapy</u> 15;5:637-41, 2016.
- 260. Essayed WI, Singh H, Lapadula G, Almodovar-Mercado GJ, Anand VK, **Schwartz TH.** Endoscopic endonasal approach to the brainstem: anatomical feasibility and surgical limitations. <u>Journal of Neurosurgery</u> 127;5:1139-1146, 2017.
- 261. Barker FG, Fahlbusch R, **Schwartz TH,** Wisoff JH. Craniopharyngioma: current and emerging treatment modalities. <u>Neurosurgical Focus</u> 41(6):E, 2016.
- 262. Moussazadeh N, Prabhu V, Bander E, Cusic R, Tsiouris AJ, Anand VK, **Schwartz TH.** Endoscopic endonasal versus open transcranial resection of craniopharyngiomas: a case matched single institution analysis. <u>Neurosurgical Focus</u> 41(6):E7, 2016.

- 263. Bander ED, Singh H, Ogilvie CB, Anand VK, **Schwartz TH.** Endoscopic endonasal versus transcranial approach to tuberculum sella and planum sphenoidale meningiomas. <u>Journal of Neurosurgery</u> 128;1:40-48, 2017.
- 264. Dhandapani S, Singh H, Negm HM, Cohen S, Anand VK, **Schwartz TH**. Cavernous sinus invasion in pituitary adenomas: systematic review and pooled data meta-analysis of radiological criteria and comparison of endoscopic and microscopic surgery. <u>World Neurosurgery</u> 96:36-46, 2016.
- 265. Cohen S, Anand VK, **Schwartz TH**. Lumbar drains decrease risk of cerebrospinal fluid (CSF) leak after extended endoscopic endonasal resection of suprasellar meningiomas in patients with high body mass index. <u>Operative Neurosurgery</u> 14;1:66-71, 2018.
- 266. Singh H, Rote S, Jada A, Almadovar-Mercado GJ, Hartl R, Anand VK. **Schwartz TH**. Greenfield JG. Endoscopic endonasal odontoid resection with real-time intraoperative image-guided computed tomography: report of 4 cases. <u>Journal of Neurosurgery</u> 128;5:1486-1491, 2017.
- 267. Esquenazi Y, Essayed WI, Singh H, Mauer E, Ahmed M, Christos PJ, **Schwartz TH.** Endoscopic endonasal versus microscopic transsphenoidal surgery for recurrent and/or residual pituitary adenomas. A systematic review and meta-analysis. <u>World Neurosurgery</u> 101:186-195, 2017.
- 268. Omay SB, Boockvar JA, Steig PE, Greenfield JP, Souweidane MM, Pisapia DJ, Anand VK, **Schwartz TH**. Do craniopharyngioma molecular signatures correlate with clinical characteristics? <u>Journal of Neurosurgery</u> 128;5:1473-1478, 2017.
- 267. Almeida JP, Liang B, Sacit OB, Setty SR, Shetty SR, Chen Y-N, Anand VK, Christo P, **Schwartz TH**. Reoperation for growth hormone secreting tumors; Report on an endonasal endoscopic series and systematic review and meta-analysis of the literature. <u>Journal of Neurosurgery</u> 129;2:404-416, 2018.
- 268. Singh H, Essayed WI, Deb S, Hoffman C, **Schwartz TH.** Minimally invasive robotic laser corpus callosotomy: a proof of concept. <u>Cureus</u> 10;9;2:e1021, 2017.
- 269. Baird-Daniel E, Daniel AGS, Wenzel M, Li D, Liou J-Y, Laffont P, Zhao M, Yuste R, Ma H, **Schwartz TH.** Glial waves triggered by seizure activity are not essential for initiating ictal onset or neurovascular coupling. <u>Cerebral Cortex</u> 27;6:3318-3330, 2017.
- 270. Janjua MB, Caruso JB, Greenfield JP, Souweidane MS, **Schwartz TH**. The combined transpetrosal approach: an anatomic study and literature review. <u>Journal of Clinical Neuroscience</u> 41:36-40, 2017.

- 271. Almeida JP. Sacit OB, Shetty SR, Ruiza-Trevino AS, Omay SB, Liang B, Chen Y-N, Anand VK, Levine B, **Schwartz TH**. Transorbital endoscopic eyelid approach for spheno-orbital meningiomas with predominant hyperostosis. <u>Journal of Neurosurgery</u> 159;10:1893-1907, 2017.
- 272. Wilson P, Omay SB, Kacker A, Anand VK, **Schwartz TH.** Endoscopic pituitary surgery in the elderly. <u>Journal of Neurosurgery</u> 128;2:429-436, 2018.
- 273. Wernicke AW, Hirschfeld C, Taube S, Yondorf MZ, Kovanlikaya I, Nedialkova L, Kulidzhanov F, Trichter S, Sabbas A, Nori D, Christos P, Ramakrishna R, Pannullo S, Stieg PE, Schwartz TH. Clinical outcomes of large brain metastases treated with neurosurgical resection and intraoperative c esium-131 brachytherapy: results of a prospective trial. International <u>Journal of Radiation</u>. <u>Biology</u>, <u>Physics</u>. 98(5):1059-1068, 2017.
- 274. Almeida JP, Ruiza-Trevino AS, Shetty SR, Sacit OB, Anand VK, Levine B, Schwartz TH. Transorbital endoscopic approach for exposure of the sylvian fissure, middle cerebral artery and crural cistern: an anatomic study <u>Acta Neurochirurgica</u> 159;10:1893-1907, 2017.
- 275. Boatay J, Ogondo-Rivas E, Alalade AF, **Schwartz, TH**. Double pituitary adenomas. Are most commonly associated with GH- and ACTH-secreting tumors. Systematic review of the literature <u>Pituitary</u> 20;6:702-708, 2017.
- 276. Shetty SR, Ruiza-Trevino AS, Omay SB, Almeida JP, Liang B, Chen Y-N, **Schwartz TH.** Limitations of the endonasal endoscopic approach in treating olfactory groove meningiomas. A systematic review <u>Acta Neurochirurgica</u> 159(10):1875-1885, 2017.
- 277. Ottenhausen M, Rumalla K, LaCorte E, Alalade A, Nair P, Forbes J, Ben Nsir A, **Schwartz TH**. Treatment strategies for craniopharyngiomas. <u>The Journal of Neurological Sciences</u> 63;1:83-87, 2019.
- 278. Omay SB, Almeida JP, Setty SR, Shetty SR, Ruiza-Trevino AS, Almeida JP, Liang B, Chen Y-N, Anand VK, **Schwartz TH.** Is the chiasm -pituitary corridor important for achieving gross total resection during endonasal endoscopic resection of craniopharyngiomas? <u>Journal of Neurosurgery</u> 129;3:642-647, 2018.
- 279. Chen Y.-N., Sacit OB, Shetty SR, Liang B, Almeida JP, Ruiz-Trevino AS, **Schwartz TH.** Transtubular excisional biopsy may be the procedure of choice for deep seated brain pathology. Case report and literature review. <u>Acta Neurochirurgica</u> 159(9):1589-1595, 2017.
- 280. Liang B, Shetty SR, Sacit OB, Almeida JP, Ni, S, Chen Y-N, Ruiz-Trevino AS, Anand VK, **Schwartz TH**. Predictors and incidence of orthostatic headache associated with

- lumbar drain placement following endonasal endoscopic skull base surgery. <u>Acta Neurochirurgicam159</u>;8:1379-1385, 2017.
- 281. Alalade AF, Ogando-Rivas E, Boatay J, Souweidane MM, Anand VK, Greenfield JP, **Schwartz TH**. Suprasellar and recurrent pediatric craniopharyngiomas: expanding indications for the extended endoscopic transsphenoidal approach. <u>Journal of Neurosurgery Pediatrics</u> 21;1:72-80, 2018.
- 282. Ottenhausen M, Rumalla K, Younus I, Minkowitz S, Tsiouris JA, **Schwartz TH**. Predictors of post-operative motor function in Rolandic meningioma surgery. <u>Journal of Neurosurgery</u> (2018; epub ahead of print).
- 283. Forbes J, Ban M, Lehner K, Ottenhausen M, LaCorte M, Alalade A, Anand VK, Greenfield JP, **Schwartz TH.** Endoscopic endonasal transsphenoidal resection of epidermoid cysts involving the ventral cranial base. <u>Journal of Neurosurgery</u> (2018; epub ahead of print).
- 284. Harris SS, Boorman LW, Kennerley AJ, Sharp PS, Martin C, Redgrave P, **Schwartz TH,** Berwick J. Seizure epicenter depth and translaminar field potential synchrony underlie complex variation in tissue oxygenation during ictal initiation. <u>NeuroImage</u> 1;171:165-175, 2018.
- 285. Ottenhausen M, Kavelin R, Alalade A, Nair P, La Corte E, Yonus I, Forbes J, Ben Nsir A, Banu MA, Tsiouris JA, **Schwartz TH**. Decision-making algorithm for minimally invasive approaches to anterior skull base meningiomas. <u>Neurosurgical Focus</u> 44(4):E7, 2018.
- 286. Hussain I, **Schwartz TH**, Greenfield JP. Endoscopic endonasal approach to the upper cervical spine for decompression of the cervicomedullary junction following occipitocervical fusion. <u>Clinical Spine Surgery</u> 31;7:285-292, 2018.
- 287. Zhang M, Azad TD, Singh H, Salam S, Jain S, Anand VK, Schwartz TH. Lumbar puncture of injection of intrathecal fluorescein. Should it be avoided in a subset of patients undergoing endoscopic endonasal resection of sellar and parasellar lesions? <u>Journal of Neurological Surgery Part B Skull Base</u> 79;6:554-558, 2018.
- 288. Liou J-Y, Ma H, Wenzel M, Zhao M, Baird-Daniel E, Smith EH, Daniel A, Emerson R, Yuste R, **Schwartz TH**, Schevon C. The role of inhibitory control in modulating long-range spread of focal ictal activity <u>Brain</u> 141;7:2083-2097, 2018.
- 289. Choi C, Colon-Berrios AR, Hamachi LS, Owen JS, **Schwartz TH**, Ma H, Kymissis I. Localizing seizure activity in the brain using implantable micro-LEDs with quantum dot downconversion. <u>Advanced Material Technology</u> DOI: 10.1002/admt.201700366. 2018.

- 290. Ottenhausen M, Alalade A, Rumalla K, Nair P, Baaj A, Hartl R, Kacker A, Greenfield JP, Anand VK, Schwartz TH. Quality of life after combined endonasal endoscopic odontoidectomy and posterior suboccipital decompression and fusion. World Neurosurgery 116;e571-576, 2018.
- 291. Younus I, Forbes JA, Avendano-Pradel R, Anand VK, **Schwartz TH**. Radiation therapy rather than prior surgery reduce the likelihood of gross total resection following endonasal endoscopic resection of recurrent craniopharyngiomas. <u>Acta Neurochirurgica</u> 160;7:1425-1431, 2018.
- 292. Singh H, Janjua MB, Ahmed M, Esquenzi Y, Dhandapani S, Mauer E, **Schwartz TH**, Souweidane MS. Factors influencing outcome in patients with colloid cysts who present with acute neurological deterioration. <u>Journal of Clinical Neuroscience</u> 54:88-95, 2018.
- 293. Shin J, Forbes J, Lehner K, Tomasiewicz H, **Schwartz TH**, Philips, CD. Skull base 3D modeling of rigid buttress for gasket-seal closure using operative endoscopic imaging: cadaveric feasibility. <u>J Neurological Surgery Part B</u> 80:67-71, 2019.
- 294. Nagappan S, Liu L, Fetcho R, Nguyen J, Nishimura N, Radwanski RE, Lieberman S, Baird-Daniel E, Ma H, Zhao M, Schaffer CB, **Schwartz TH.** *In vivo* femtosecond laser sub-surface cortical microtransections attenuate acute rat focal seizures. <u>Cerebral Cortex</u> 29:8;:3415-3426, 2019.
- 295. Husain Q, Forbes J, Riley CA, Kacker A, **Schwartz TH.** Interactive case learning series-September 2018: Extended endoscopic resection of craniopharyngioma. <u>Int Forum Allergy Rhinol.</u> Sept, 2018.
- Lin E, Scognamiglio T, Zhao Y, Schwartz TH, Phillips CD. Prognostic implications of gadolinium enhancement of skull base chordomas. <u>AJNR Am J Neuroradiol</u>. 39:8;1509-1514. 2018.
- 297. La Corte E, Younos I, Pivari F, Ottenhausen M, Forbes JA, Pisapia DJ, Dobri GA, Schwartz TH. BRAF V600E mutant papillary craniopharyngiomas. <u>Pituitary</u> 21;6:571-583, 2018.
- 298. Bander ED, Jones SH, Pisapia D, Magge R, Fine H, **Schwartz TH**, Ramakrishna R. Tubular brain tumor biopsy improves diagnostic yield for subcortical lesions. <u>Journal of Neuro-Oncology</u> 141;1:121-129, 2019.
- 299. Forbes JA, D'Herbemont S, Lehner KR, Martinez DP, Navarro- Chávez IP, Rosito DM, **Schwartz TH**. Feasibility of endoscopic endonasal approach for clip application of cerebral aneurysms: a systematic review. <u>Journal of Neurol Sci</u> 80;1:67-71, 2019.

- 300. Riley C, Tabaee A, Conley C, Amine M, Soneru CP, Anand VK, **Schwartz TH**. Long-term Sinonasal outcomes after endoscopic skull base surgery with nasoseptal flap reconstruction <u>Laryngoscope</u> 129;5:1035-1040, 2019.
- 301. **Schwartz TH**, Morgenstern P, Anand VK. Lessons learned in the evolution of endoscopic skull base surgery. <u>Journal of Neurosurgery</u> 130;2:337-346, 2019.
- 302. La Corte E, Selimi A, Ottenhausen M, Forbes JA, Serrao G, **Schwartz TH**. Anterior communicating artery division in the endoscopic endonasal translaminar terminalis approach to the third ventricle. An anatomical feasibility study. <u>Acta Neurochirurgica</u> 161;4:811-820, 2019.
- 303. Rumalla K, Smith KA, Arnold PM, **Schwartz TH**. Readmission following surgical resection of intractable epilepsy: nationwide rates, causes, predictors, and outcomes. Operative Neurosurgery 16;3:374-382, 2019.
- Weidman EK, Morgenstern PF, Phillips CD, Greenfield JP, **Schwartz TH**, Heier LA. Beals syndrome with middle ear dysplasia and encephalocele: a case report and review of imaging findings. <u>International Journal of Pediatric Otorhinolaryngology</u> 10;117:26-29, 2018.
- 305. Shafiq AR, Wernicke AG, Riley CA, Morgenstern PF, Nedialkova L, Pannullo S, Parashar B, Magge R, **Schwartz TH.** Placement of cesium-131 permanent brachytherapy using endoscopic endonasal approach for recurrent anaplastic meningioma: case report and technical note. <u>Journal of Neurosurgery</u> (2019; epub ahead of print).
- 306. Forbes JA, Ordonez-Rubiano EG, Tomasiewicz, H, Banu M, Younus I, Dobri G, Phillips DD, Kacker A, Cisse B, Anand VK, **Schwartz TH**. Endonasal endoscopic resection of intrinsic third ventricular craniopharyngiomas: surgical results. <u>Journal of Neurosurgery</u> (2018; epub ahead of print).
- 307. Harris SS, Boorman LW, Das D, Kennerley AJ, Sharp PS, Martin C, Redgrave P, **Schwartz TH**, Berwick J. Physiological and pathological brain activation in the anesthetized rat produces hemodynamic-dependent cortical temperature increases that can confound BOLD fMRI signal. <u>Frontiers in Neuroscience</u> 12;550: doi:10.3389/fnins.2018.00550, 2018.
- 308. Ordonez-Rubiano EG, Forbes JA, Morgenstern PF, Dobri GA, Greenfield JP, Souweidane MM, Tsiouris AJ, Anand VK, Kacker A, **Schwartz TH**. Preserve or sacrifice the stalk? Endocrinological outcomes, extent of resection and recurrence rates following endoscopic endonasal resection of craniopharyngiomas. <u>Journal of Neurosurgery</u> (2018; epub ahead of print).

- 309. Negm HN, Singh H, Dhandapani S, Cohen S, Anand VK, **Schwartz TH**. Landmarks to identify the petrous apex through the endonasal approach without transgression of a sinus. <u>Journal of Neurological Surgery Part B Skull Base</u> 79; 2:156-160, 2018.
- 310. Alalade AF, Forbes J, Ottenhausen M, Uribe-Cardenas R, Hussain I, Ogando-Rivas E, Nair P, Lehner K, Kacker A, **Schwartz TH**, Greenfield JP. A dual approach for the management of complex cranioverebral junction abnormalities. Combined endoscopic endonasal odontoidectomy and posterior decompression and fusion. <u>World Neurosurgery X</u>. 2019 Jan 24;2:100010. doi: 10.1016/j.wnsx.2019.100010. eCollection 2019
- 311. Mahase SS, Navrashina K, **Schwartz TH**, Parashar TH, Wernicke G. Intraoperative brachytherapy for resected brain metastases. <u>Brachytherapy</u> 18;3:258-270, 2019.
- 312. Chidambaram S, Pannullo S, **Schwartz TH**, Wernicke AG. Reirradation of recurrent brain metastases. Where do we stand? <u>World Neurosurgery</u> 125:156-163, 2019.
- 313. Riley C, Soneru CP, Tabaee A, Kacker A, Anand VK, **Schwartz TH.** Technological and idealogical innovations in endoscopic skull base surgery. <u>World Neurosurgery</u> S1878-8750;19:30220-7, 2019.
- 314. Chidambaram S, Pannullo SC, Roytman M, Pisapia DJ, Liechty B, Magge RS, Ramakrishna R, Stieg PE, **Schwartz TH**, Ivanidze J. Dynamic contrast enhanced magnetic resonance imaging perfusion characteristic in meningiomas treated with resection and adjuvant radiosurgery. <u>Neurosurgical Focus</u> 46;6:E10, 2019.
- 315. Morgenstern PF, Ivasyk I, Anand VK, **Schwartz TH.** The evolution of endoscopic skull base surgery outcomes: defining the edge of the envelope <u>World Neurosurgery</u> 124;491-501, 2019.
- 316. Eljalby M, Pannullo SC, **Schwartz TH**, Parashar B, Wernicke AG. What is the optimal timing and sequence of immunotherapy when used in combination with stereotactic radiation in the treatment of brain metastases? <u>World Neurosurgery</u> 127:397-404, 2019.
- 317. Soneru CP, Riley C, Tabaee A, Kacker A, Anand VK, **Schwartz TH.** The challenge of skull base closure. Methods for reducing post-operative CSF leak. <u>World Neurosurgery</u> 124, 502-512, 2019.
- 318. Soneru CP, Riley CA, Minkowicz, S, Tabaee A, Anand VK, **Schwartz TH.** Adherus sealant in endoscopic skull base surgery: examining safety, imaging characteristics and sinonasal quality of life. <u>Journal of Neurological Surgery Part B</u> 81;6:659-663, 2020.
- 319. Ivanidze J, Roytman M, Magge RS, Pisapia D, Stieg PE, **Schwartz TH**, Gupta A, Dutruel SP, Karakatsanis N, Nehmeh SA, Osborne J, Pannullo SC. Gallium-68-

- DOTATATE PET in the evaluation of intracranial meningiomas. <u>Journal of Neuroimaging</u> 29;5:650-656, 2019.
- 320. Soneru CP, Riley CA, Hoffman K, Tabaee A, **Schwartz TH**. Intra-operative MRI vs endoscopy in achieving gross total resection of pituitary adenomas: A systematic review. Acta Neurochirurgica 161;8:1683-1698, 2019.
- 321. Hussain I, Schmidt FA, Kirnaz S, Wipplinger C, **Schwartz TH,** Hartl R. MIS approaches to the cervical spine. <u>Journal of Spinal Surgery</u> 5(Suppl 1):S74-S83, 2019.
- 322. Gerges MM, Arnaout MM, El Asri AC, Cummock MD, Roshdy A, **Schwartz TH.** Increased frequency of cataract surgery in elderly patients with pituitary macroadenomas and chiasmal compression. <u>Pituitary</u> 22;4:405-410, 2019.
- 323. El Asri AC, Arnaout M, Gerges M, Miloudi G, El Mostarchid B, **Schwartz TH.**Prognosis factors in oculomotor schwannoma: a case of endonasal endoscopic approach and systemic review of the literature. <u>World Neurosurgery</u> 129:72-80, 2019.
- 324. Younus I, Uribe-Cardenas R, Ramakrishna R, **Schwartz TH.** Incidence and risk factors associated with reoperation for sellar hematoma following endoscopic transsphenoidal pituitary surgery. <u>Journal of Neurosurgery</u> 133:702-708, 2020.
- 325. Gerges MM, Rumalla K, Godil SS, **Schwart TH.** Genomic profile of a primary squamous cell carcinoma arising from malignant transformation of a pineal epidermoid cyst. <u>Acta Neurochirurgica</u> 161;9:1829-1834, 2019.
- 326. Liou JY, Baird-Daniel E, Zhao M, Daniel A, Schevon CA, Ma H, **Schwartz TH.** Burst suppression uncovers rapid widespread alterations in network excitability caused by an acute seizure focus. <u>Brain</u> 142;10:3045-3058, 2019.
- 327. Younus I, Dobri GA, Ramakrishna R, **Schwartz TH.** Readmission after endoscopic transsphenoidal pitutiary surgery. Analysis of 584 consectuive cases. <u>Journal of Neurosurgery</u> 133:1242-1247, 2020.
- Wang EW, Zanation A, Gardner P, **Schwartz TH**, Eloy JA, Adappa ND, Mettag M, Bleier BS, Cappabianca P, Carrau RL, Casiano RR, Cavallo LM, Ebert CS Jr, El-Sayed IH, Evans JJ, Fernandez-Miranda JC,Folbe A, Froelich S, Gentili F, Harvey RJ, Hwang PH, Jane JA Jr, Kelly DF, Kennedy D, Knosp E, Lal D, Lee JYK, Liu JK, Lund VJ, Pamer JN, Parthasarathy TD, Prevedello DM, Schlosser RJ, Sindwani R, Solares CA, Tabaee A, Teo C, Thorp BD, de Arnaldo E, Vellutini S, Woodworth BA, Witterick I, Wormald PJ, Snyderman CH. ICAR: endoscopic skull base surgery. Int Forum Allergy Rhinol 9;S3:S145-S365, 2019.

- 329. Julie DAR, Ahmed Z, Karceski SC, Pannullo SC, **Schwartz TH**, Parashar B, Wernicke AG. An overview of anti-epileptic therapy in patients with malignant tumors of the brain undergoing radiation therapy. <u>Seizure</u> 12;70:30-37, 2019.
- 330. Arnaout M, Greenfield, JP, Anand VK. **Schwartz TH.** Endonasal surgery for suprasellar germinomas. Two cases and review of the literature. <u>Acta Nerochirurgica</u> 161(8):1699-1704, 2019.
- 331. Gerges M, Golid SS, **Schwartz TH**. Endoscopic transorbital approach to the infratemporal fossa and parapharyngeal space: a cadaveric study. <u>Journal of Neurosurgery</u> 133:1948-1959, 2020.
- 332. Gerges M, Godil SS, Kacker A, **Schwartz TH.** Endoscopic endonasal transclival resection of pontine metastasis: Care report and operative video. <u>Operative Neurosurgery</u> 19;1:E75-E81, 2020.
- 333. Yuan M, Behrami E, Pannullo SP, **Schwartz TH**, Parashar B, Wernicke AG. The relationship between tumor volume and timing of stereotactic radiosurgery to maximize local control. A critical review. Cureus 11(9): e5762. DOI 10.7759, 2019
- 334. Bander ED, Kocharian G, **Schwartz TH.** Spontaneous regression of a clival chordoma. Case report. Acta Neurochirurgica 162;2:433-436, 2020.
- 335. Golub D, Hyde J, Dogra S, Nicholson J, Kirkwood KA, Gohel P, Loftus S, **Schwartz TH.** Intraoperative MRI versus 5-ALA in high-grade glioma resection: a network meta-analysis. <u>Journal of Neurosurgery</u> 134:484-498, 2021.
- 336. Arko L, Lee J, Godil S, Hanz S, Anand VK, **Schwartz TH**. Endonasal endoscopic fenestration of Rathke Cleft Cysts. Whether to leave the fenestration open or closed? <u>Journal of Neurological Surgery Part B Skull Base</u> 82 (suppl 53):e101-e104, 2021.
- 337. Gerges MM, Godil SS, Rumalla K, Younus I, Kacker A, Tabaee A, Anand VK, **Schwartz TH**. Long-term outcomes after endonasal endoscopic resection of non-functioning pituitary adenomas <u>Journal of Neurosurgery</u> 134:535-546, 2021.
- 338. Younus I, Uribe-Cardenas R, Morgenstern P, Kacker A, Tabaee A, Anand VK, **Schwartz TH.** How long is the tail end of the learning curve? Results from 1000 consecutive endonasal endoscopic skull base cases following the initial 200 cases? <u>Journal of Neurosurgery</u> 134:750-760, 2021.

- 339. Gerges MM, Youngerman B, Anand VK, Greenfield JG, **Schwartz TH.** Endoscopic endonasal resection of giant pediatric craniopharyngioma: impact on hypothalamic edema. Neurosurgical Focus: Video 2;2:V6, 2020.
- 340. Younus I, Ramakrishna R, Kacker A, Tabaee A, Anand VK, **Schwartz TH.** Impact of Medicaid insurance on outcomes following endoscopic transsphenoidal pituitary surgery. <u>Journal of Neurosurgery</u> 134:801-806, 2021.
- 341. Youngerman BE, Kosty JA, Gerges MM, Tabaee A, Kacker A, Anand VK, **Schwartz TH.** Acellular derman matrix as an alternative to autologous fascia lata for skull base repair following extended endoscopic endonasal approach. Early single center experience. <u>Acta Neurochirurgica</u> 162;4:863-873, 2020.
- Nair DR, Laxer KD, Weber PB, Murro MA, Park YD, Barkley GL, Smith BJ, Gwinn RP, Doherty MJ, Noe KH, Zimmerman RS, Bergey GK, Anderson WS, Heck C, Liu CY, Lee RW, Sadler T, Duckrow RB, Hirsch LJ, Wharen RE, Tatum W, Srinivasan S, McKhann GM, Agostini MA, Alexopoulos AV, Jobst BC, Roberts DW, Salanova V, Witt TC, Cash SS, Cole AJ, Worrell GA, Lundstrom BN, Edwards JC, Halford JJ, Spencer DC, Ernst L, Skidmore CT, SperlingvMR, Miller I, Geller EB, Berg MJ, Fessler AJ, Rutecki P, Goldman AM, Mizrahi EM, Gross RE, Shields DC, Schwartz TH, Labar DR, Fountain NB, Elias WJ, Olejniczak PW, Villemarette-Pittman NR, Eisenschenk S, Roper SN, Boggs JG, Courtney TA, Su FTn, Seale CG, Miller KL, Skarpaas TL, Morrel MJl. Nine year prospective efficacy & safety of brain-responsive neurostimulation for focal epilepsy Neurology 95;9:e1244-e1256, 2020.
- 343. Julie DA, Lazow SP, Vanderbilt DB, Taube S, Yondorf MZ, Sabbas A, Pannullo S, Stieg PE, **Schwartz TH**, Wernicke AG. A match pair analysis of clinical outcomes after intracavitary cesium-131 brachytherapy versus stereotactic radiosurgery for resected brain metastases. <u>Journal of Neurosurgery</u> 134;5:1447-1454, 2020.
- 344. Pine AR, Cirigliano SM, Nicholson J, Hu Y, Linkous A, Miyaguchi K, Edwards L, Singhania R, **Schwartz TH**, Ramakrishna R, Pisapia D, Elemento O, Fine HA. Tumor microenvironment is critical for the maintenance of cellular states found in primary glioblastomas. <u>Cancer Discovery</u> 10;7:964-979, 2020.
- 345. Youngerman BE, Banu MA, Gerges MM, Odigie E, Tabaee A, Kacker A, Anand VK, **Schwartz TH.** Endoscopic endonasal approach for suprasellar meningiomas. Introduction of a new scoring system to predict extent of resection and assist in case selection with long-term outcome data. Journal of Neurosurgery 135:113-125, 2021.
- 346. Micko A, Rapoport B, Youngerman BE, Kosty J, Brunswick A, Shahresani S, Zada G, Schwartz TH. Limited use of 5-ALA optical fluorescence in endoscopic endonasal skull

- base surgery; a multicenter retrospective study. <u>Journal of Neurosurgery</u> 135:535-541, 2021.
- 347. Uribe-Cardenas R, Boyke AE, Schwarz JT, Morgenstern PF, Greenfield JG, **Schwartz TH,** Rutka JT, Drake J, Hoffman CE. Utility of Invasive electrocorticography in children younger than three years with refractory epilepsy. <u>Journal of Neurosurgery Pediatrics</u> 26:648-653, 2020.
- 348. Wernicke AG. Taube S, Smith AW, Herskovic A, Ramakrishna R, Stieg PE, Pannullo S, Scheff R, Kovanlikaya I, Parashar B, Nedialkova L, Kulidzhanov F, Sabbas A, Trichter S, **Schwartz TH**. Cs-131 brachytherapy for recurrent glioblatoma combined with bevacizumab improves avoids radiation necrosis while maintaining local control Brachytherapy 19:705-712, 2020.
- 349. Younus I, Gerges MM, Uribe-Cardenas R, Morgenstern PF, Kacker A, Tabaee A, Anand VK, **Schwartz TH.** The slope of the learning curve in 600 consecutive endoscopic transsphenoidal pituitary cases. <u>Acta Neurochirurgica</u> 162;10:2361-2370, 2020.
- 350. Husain Q, Kim MH, Hussain I, Anand VK, Greenfield JP, **Schwartz TH**, Kacker A.. Endoscopic transnasal approaches to the craniovertebral junction: the otolaryngologist's perspective. World Journal of Otorhinolaryngology-Head and Neck Surgery 6; 94e99, 2020
- 351. **Schwartz TH,** McDermott M. Abandon the Simpson Grade but preserve the message. <u>Journal of Neurosurgery</u> 135:488-495, 2021.
- 352. Chiang GC, Pisapia DJ, Liechty B, Magge R, Ramakrishna R, Knisely J, **Schwartz TH**, Fine HA, Kovanlikaya I. The prognostic value of MRI subventricular zone involvement and tumor genetics in lower grade gliomas. <u>Journal of Neuroimaging</u> 30;901-909, 2020.
- 353. Lee M, Rivera-Rosario HT, Bewley GP, Wang J, Warhaft Z, Stylman B, Kim MH, Park AI, MacMahon A, Kacker A, **Schwartz TH**. Development and validation of face-mounted, negative pressure antechamber for endonasal surgery. <u>Journal of Neurosurgery</u> doi: 10.3171/2020.10.JNS202745, 2021
- 354. Roth O'Brien DA, Poppas P, Kaye SM, Mahase S, Anjile A, Christos PJ, Liechty B, Pisapia D, Ramakrishna R, Wernicke AG, Knisely JPS, Pannullo S, **Schwartz TH.** Time to administration of stereotactic radiosurgery to the cavity after surgery for brain metastases. A real-world analysis. <u>Journal of Neurosurgery</u> (in press).
- 355. Hoffman C, Parker WE, Rapoport BI, Zhao M, Ma H, **Schwartz TH.** Innovations in the neurosurgical management of epilepsy. <u>World Neurosurgery</u> 139:775-788, 2020.

- 356. Kuzan-Fischer CM, Parker WE, **Schwartz TH**, Hoffman CE. Challenges of Epilepsy Surgery. <u>World Neurosurgery</u> 139:762-774, 2020.
- 357. Hussain I, Kocharian G, Tosi U, **Schwartz TH**, Hoffman CE. Foundations of the Diagnosis and Surgical Treatment of Epilepsy. <u>World Neurosurgery</u> 139:750-761, 2020.
- 358. Chaurasia B, Deora H, El-Ghandour NMF, Oyesiku NM, Chaurasia RK, Schulder M, Soriano Sanchez JA, Teo M, Hernesniemi J, Linzey JR, **Schwartz TH**, Cohen-Gadol AA, Lawton M, Umana G, Mura J, Grotenhuis A, Sinha AK, Schroeder HWS, Natarajan S, Sughrue ME, Spetzler RF, Drummond K, Tanikawa R, Seixo Kadri PAD, Kato Y, Teo C, Suri A, Tomasi SO, Winkler PA, Scalia G, Sampron N, Rasulic L, Cappabianca P, Fontanella MM, Laws ER. In memoriam: A Memoir for our fallen "heroes".

 Neurosurgery 87;4:854-856, 2020.
- 359. Julie DA, Lazow SP, Vanderbilt DB, Taube S, Yondorf MZ, Sabbas A, Pannullo S, **Schwartz TH**, Wernicke AG. A matched-pair analysis of clinical outcomes after intracavitary cesium-131 brachytherapy versus stereotactic radiosurgery for resected brain metastases. <u>Journal of Neurosurgery</u> (in press; epub ahead of print).
- 360. Hanz SZ, Arko L 4th, Schmidt F, Kacker A, Tsiouris AJ, Anand VK, **Schwartz TH.** Low incidence of true Sternberg's canal defects among lateral sphenoid sinus encephaloceles. <u>Acta Neurochirurgica</u> 162;10:2413-2420, 2020.
- 361. Roytman M, Tassler A, Kacker A, **Schwartz TH**, Dobri G, Strauss SB, Capalbo AM, Magge RS, Barbaro M, Lin, E, Osborne JR, Ivanidze J. [68Ga]-DOTATATE PET/CT and PET/MRI in the diagnosis and management of esthesioneuroblastoma: A case series <u>Journal of Neurosurgery</u> (in press).
- 362. Ming Q, Liou J-Y, Yang F, Li J, Chu C, Zhou Q, Wu D, Xu S, Luo P, Liang J, Li D, Pryor K, Lin W, **Schwartz TH**, Ma H. Isoflurane-induced burst suppression is a thalamus-modulated focal onset rhythm with persistent local asynchrony and variable propagation patterns in rats. Frontiers in Systems Neuroscience 14:Article 599781, 2021
- 363. Youngerman BE, Shtayer L, Gerges MM, Larsen AG, Tomasiewicz, HC, **Schwartz TH.** Eyebrow supraorbital keyhole craniotomy for olfactory groove meningiomas with endoscope assistance: case series and systematic review of extent of resection, quantification of postoperative frontal lobe injury, anosmia and recurrence. <u>Acta Neurochirurgica</u> 163:101-112, 2021.
- 364. Arnaout MM, Hanz SZ, Heieir LA, **Schwartz TH**. Prevalence and outcome of incidental of anterior and middle cranial fossa encephaloceles <u>World Neurosurgery</u> (in press).

- 365. Carnevale JA, Babu CS, Goldberg JL, Fong R, **Schwartz TH**. Visual deterioration after endonasal endoscopic skull base surgery: causes, treatments and outcomes. <u>Journal of Neurosurgery</u> (in press).
- 366. Michael AP, Elbuluk O, Kelly AP, Tsiouris AJ, Tabaee A, Kacker A, Anand VJ, **Schwartz TH**. The critical importance of a vascularized flap in preventing recurrence after endoscopic repair of spontaneous cerebrospinal fluid leaks and meningoencephaloceles <u>Journal of Neurosurgery</u> (in press).
- 367. Godil SS, Tosi U, Gerges M, Garton ALA, Dobri G, Kacker A, Tabaee A, Anand VK, **Schwartz TH**. Long-term tumor control after endoscopic endonasal resection of craniophayngioma favors gross total resection of subtotal resection with radiation. <u>Journal of Neurosurgery</u> (in press).
- 368. Fong R, **Schwartz TH**. Endoscopic endonasal surgery for craniopharyngiomas. <u>J Neurological Sciences</u> 65;2:133-139, 2021.
- 369. Gerges MM, Sabry H, Jalalod din H, Ghobashy MA, **Schwartz TH**. Evaluation of pure endoscopic endonasal approach in management of giant pituitary adenoma <u>QJM</u>. <u>Internat J Med</u> 114;Supp 1: 2021.
- 370. Marcus HJ, Khan DZ, Borg A, Buchfelder M, Cetas JS, Collins JW, Dorward NL, Fleseriu M, Gurnell M, Javadpour M, Jones PS, Koh CH, Layard Horsfall H, Mamelak AN, Mortini P, Muirhead W, Oyesiku NM, **Schwartz TH**, Sinha S, Stoyanov D, Syro LV, Tsermoulas G, Williams A, Winder MJ, Zada G, Laws ER. Pituitary society expert Delphi consensus: operative workflow in endoscopic transsphenoidal pituitary adenoma resection. <u>Pituitary</u> 24; 839–853, 2021.
- 371. Tosi U, Chidambaram S, Schwartz J, Martinez Diaz S, Singh S, Norman S, Radwanski R, Murthy S, Apuzzo M, Pannullo S, **Schwartz TH.** The world of neurosurgery reimagined post COVID-19: crisis <-> opportunities. <u>World Neurosurgery</u> 148;251-255, 2021.
- 372. Henderson F, **Schwartz TH**. Qualitative head-to-head comparison of headlamp and microscope for visualizing 5-ALA fluorescence during resection of glioblastoma. Neurosurgical Focus (in press).
- 373. Maayan O, Babu C, Lavieri MET, Chua J, Christo PJ, **Schwartz TH**. Combined use of vancomycin powder and betadine irrigation lowers the incidence of post-craniotomy wound infection in low-risk cases: A single-center risk-stratified cohort analysis. <u>Acta Neurochirurgica</u> (in press).
- 374. Henderson F Jr., **Schwartz TH**. Update on craniopharyngioma management. <u>Journal of Neuro-Oncology (in press)</u>.

- 375. Roytman M, Kim S, Glynn S, Thomas C, Lin E, Feltus W, Mage R, Liechty B, **Schwartz TH**, Ramakrishna R, Karatsanis NA, Pannullo SP, Osborn JR, , Knisely JPS, Ivanidze J. PET/MR Imaging of somatostatin receptor expression and tumor vascularity in meningioma: Implications for pathophysiology and tumor outcomes <u>Fronteirs in Oncology</u> (in press).
- 376. Giantin Larsen AM, Parker WE, Cho S, Goldberg JI, Carnevale JA, Michael AP, Teng CW, De Raven E, Brennan CW, Lee JYK, **Schwartz TH**. The evolution of 5-Aminolevulinic acid fluorescence visualization. Time for a headlamp/loupe combination. World Neurosurgery doi: 10.1016/j.wneu.2021.12.089.
- 377. Kim MH, Lee M, Schwartz J, Kacker A, **Schwartz TH**. A novel negative pressure, face-mounted antechamber to minimize aerosolization of particles during endoscopic skull base surgery <u>Operative Neurosurgery</u> 21;3:131-136, 2021
- 378. Yang F, Li J, Song Y, Zhao M, Niemeyer J, Luo P, Li D, Lin W, Ma H, **Schwartz TH.** Mesoscopic mapping of ictal neurovascular coupling in awake behaving mice using optical spectroscopy and genetically encoded calcium indicators <u>Frontiers in Neuroscience</u> (in press).
- 379. Cornolia MV, Roche P-H, Bruneau M, Cavallo L, Daniel RT, Messerer M, Froehlich S, Gardner PA, Gentili F, Kawaswe T, Paraskevopoulos D, Regis J, Schroeder HWS, **Schwartz TH**, Sindou M, Cornelius JF, Tatagiba M, Meling TR. Management of cavernous sinus meningiomas: Ccosensus statement of behalf of the EANS skull base section. Brain and Spine (in press).

Submitted for Publication

- 1. Faraz S, Yondorf M, Smith A, Tritchter S, Nedialkova L, Sabbas A, Parashar B, Ramakrishna R, Stieg PE, **Schwartz TH,** Wernicke GA. Prospective results of dosimetric analysis of Cesium-131 brachytherapy for the treatment of resected brain metastases: dosimetric differences between Cesium-131 and Iodine-125 and subsequent implications for rates of radiation necrosis. (Submitted for publication).2. Godil SS, Gerges MM, Kacker A, Hartl R, **Schwartz TH**. Endoscopic endonasal resection of foramen magnum meningioma. Case report and operative video. (Submitted for publication).
- 2. Li J, Yang F, Lin W, Song Y, Luo P, Zhao M, Niemeyer J, Li D, **Schwartz TH**, Ma H. Temporal subtraction method for removing hemodynamic artifact during widefield fluorescent imaging of epileptiform activity. (submited for publication).

- 3. Yuan M, Behrami E, Pannullo SP, **Schwartz TH**, Parashar B, Wernicke AG. The relationship between tumor volume and timing of stereotactic radiosurgery to maximize local control (submitted for publication).
- 4. Roth O'Brien DA, Poppas P, Kaye SM, Mahase S, Anjile A, Christos PJ, Liechty B, Pisapia D, Ramakrishna R, Wernicke AG, Knisely JPS, **Schwartz TH.** Delays in adjuvant fractionated stereotactic radiosurgery reduce local control for resected brain metastases (submitted for publication).
- 5. Glynn SM, Sweeney E, Lin E, Magge R, **Schwartz TH**, Ramakrishna R, Knisely, J, Pannullo S, Ivanidze J. DCE perfusion MRI of meningiomas: Effect of tumor characteristics on blood brain barrier disruption in subjacent parenchyma. (submitted for publication).
- 6. Kim Y, Choi C, Chen E-C, Daniel AGS, Masurkar A, **Schwartz TH,** Ma H, Kymissis I. An ultra thin implantable system for cerebral blood volume monitoring using flexible OLED and OPD. (submitted for publication).
- 7. Di Somma A, Kong S-S, de Notaris M, Moe K, Espana JCS, **Schwartz TH**. Ensenat J. Endoscopic transorbital surgery, Levels of Difficulty (submitted for publication).
- 8. Fong RP, Saavedra J, Lem M, Youngerman BE, Dobri GA, Anand VK, **Schwartz TH.** Radiogrpahic and clinical features differentiating Rathke cleft cyst from xanthogranuloma. (submitted for publication).
- 9. Wernicke AW, Yondorf MZ, Nedialkova L, Trichter S, Sabbas A, Khulidzhanov F, Parashar B, Nori D, Chao KSC, Boockvar J, Pannullo S, Stieg PE, **Schwartz TH.** Superiority of cesium-131 to iodine-125 in minimizing incidence of radiation necrosis: prospective results of dosimetric analysis of cesium-131 brachytherapy for the treatment of resected brain metastases. (submitted for publication).
- 10. Lieberman S, Rivera DA, Morton R, Hingorani A, Southard T, Johnson L, Reufauf J, Radwanski RE, Zhao M, Mishimura N, Bracko O, **Schwartz TH**, Schaffer CB. Circumscribing laser cuts attenuate seizure propagation in a mouse model of focal epilepsy (submitted for publication).
- 11. Pan PC, Pisapia DJ, Ramakrishna R, **Schwartz TH,** Pannullo S, Knisely J, Chiang GC, Ivanidze J, Stieg PE, Liechty B, Brandaier A, Fine HA, Magg RS. Outcomes of upfront radiation and monitoring in atypical meningiomas. (submitted for publication).
- 12. Kim, SH, Roytman M, Madera G, Magg R, Liechty B, Ramakrishna R, Pannullo S, **Schwartz TH**, Karakatsanis N, Osborne JR, Lin E, Knisely JPS, Ivanidze J. Evaluating diagnostic accuracy and determining optimal diagnostic thresholds of three different approaches

- to [68Ga]-DOTATATE PET/MRI analysis in patients with meningioma. (submitted for publication).
- 13. Roytman M, **Schwartz TH**, Pannullo SC, Stieg PE, Knisely J, Osborne JR, Ivanidze J. Ga-68-DOTATATE PET/CT in the evaluation of head and neck paragangliomas. Clinical Nuclear Medicine (submitted for publication).
- 14. Kacker A, Tiffany Peng T, **Schwartz TH,** Greenfield, JP. Successful endoscopic transsphenoidal resection of suprasellar mass in two pediatric patients with non-pneumatization of the sphenoid sinus (submitted for publication).
- 15. George E, Perrine K, **Schwartz TH**, Ramakrishna R. Intraoperative language mapping in dysphasic patients. (submitted for publication).
- 16. Gerges MM, Godfrey K, Levine B, **Schwartz TH**. Endoscopic transorbital approach to the lateral cavernous sinus and Meckel's cave: Cadaveric dissection and operative cases. (submited for publication).
- 17. Almeida JP, Setty SR, Shetty SR, Ruiza-Trevino AS, Omay SB, Liang B, Chen Y-N, Anand VK, **Schwartz TH.** Endoscopic skull base surgeons. Defining a new subspecialty in neurosurgery. (submitted for publication).
- 18. Henderson F Jr., Youngerma Bm Alexander T, Tabaee A, Kacker A, Anand VK, **Schwartz TH**. Endonasal transsphenoidal surgery for planum sphenoidale versus tuberculum sella meningiomas (submitted for publication).
- 19. Kelly A, Greenfield JP, **Schwartz TH.** High incidence of hormone producing compared with non-hormone producing adenomas in pediatric patents: case series and systematic literature review (submitted for publication).
- 20. Babij R, Ferrer C, Buch AM, Duan ZRS, Niemeyer J, Ma H, Fetcho RN, Ce A, Donatelle A, Takumi O, **Schwartz TH**, Huang BS, Liston C, De Marco Garcia N. Gabrb3 is required for the functional integration of pyramidal neuron subtypes in the somatosensory cortex. (submitted for publication)
- 21. Foulsham W, North VS, Botsford BW, Henderson F, Godfrey KJ, **Schwartz TH**, Orlin A. Terson-like syndrome as an unusual compleaition of transorbital neuroendoscopic surgery. (submitted for publication).
- 22. Marcus HJ, Khan DZ, Borg A, Buchfelder M, Cetas JS, Collins J, Dorward NL, Fleseriu M, Gurnell M, Javadpour M, Jones P, Koh CH, Horsfall HL, mamelak A, Mortini P, Muirhead W, Oyesiku NM, **Schwartz TH**, Sinha S, Stoyanov D, Syro LV, Tsermoulas G,

- Williams A, Winder MJ, Zada G, Laws ER. Pituitary Society Expert Delphi Consensus. Operative Workflow in Endoscopic Transsphenoidal Pituitary Adenoma Resection. (submitted for publication).
- 23. Mahase SS, Roytman M, Roth O-Brien D, Ivanidze J, **Schwartz TH**, Pannullo SC, Ramakrishna R, Magge RS, Williams N, Fine HA, Chiang GCY, Knisely JPS. Concurrent stereotactic body radiotherapy and immune checkpoint inhibitor therapy for recurrent high-grade gliomas (submitted for publication).
- 24. Benner D, Hendricks BK, Elahi C, White MD, Kocharian G, Sanchez LEA, Zapi KE, Garton ALA, Carnevale JA, **Schwartz TH**, Dowlati E, Felbaum DR, Sack KD, Jean WC, Chan AK, Burke JF, Mummaneni PV, Strong MJ, Yee TJ, Oppenlander ME, Ishaque M, Shaffrey ME, Syed HR, Lawton MT. Neurosurgery subspecialty practice during a pandemic: a mulitcenter analysis of operative practice in 7 U.S. neurosurgery departments during COVID-19 (submitted for publication).
- 25. Ivanidze J, Roytman M, Skafida M, Glynn S, Osborn JR, Pannullo SP, Nehmeh S, Ramakrishna R, **Schwartz TH**, Knisely JPS, Lin E, Karatsanis NA. Dynamic 68Ga-DOTATATE PET/MRI in the diagnosis and management of intracranial meningiomas (submitted for publication).
- 26. Mahas S, Roytman M, Roth O'Brien D, Ivanidze J, **Schwartz TH**, Pannullo SC, Ramakrishna R, Magge RS, Williams N, Fine HA, Chiang GC-Y, Knisely JPS. Concurent stereotactic body radiotherapy and immune checkpoint inhibitor therapy for recurrent high-grade gliomas (Submited for publication)

Edited Books and Journals

- 1. **Schwartz TH**, McCormick PC. Eds. Intramedullary Spinal Cord Tumors. <u>Journal of Neuro-Oncology</u> 47(3) 2000.
- 2. **Schwartz TH.** Assist. Ed., <u>Fundamentals of Operative Techniques in Neurosurgery</u>. New York, NY: Thieme, 2002.
- 3. Anand VK, **Schwartz TH**. Eds. <u>Practical Endoscopic Skull Base Surgery</u>. San Diego, CA. Plural Publishing, 2007.
- 4. **Schwartz TH**, Anand VK. Eds. <u>Endoscopic Skull Base and Pituitary Approaches: A Step-By-Step Guide for Cadaveric Dissection and Surgical Instruction</u>. Tuttlingen, Germany. Endo-Press, 2007.

- 5. **Schwartz TH**, Anand VK. Eds. <u>Endoscopic Skull Base and Pituitary Approaches: A Step-By-Step Guide for Cadaveric Dissection and Surgical Instruction</u>. 2nd Edition. Tuttlingen, Germany. Endo-Press, 2010.
- 6. Schwartz TH, Anand VK. Eds. Endoscopic Pituitary Surgery. A Comprehensive Guide. New York, NY, Thieme, 2011.
- 7. Anand VK, **Schwartz TH**. Eds. Endoscopic Skull Base and Pituitary Surgery in Operative Techniques in Otolaryngology-Head and Neck Surgery (2011).
- 9. Zhao M, Ma H, **Schwartz TH** Eds. <u>NeuroMethods: Neurovascular Coupling Methods</u>, Springer 2015.
- 10. Cappabianca P, Jane JJ Jr, **Schwartz TH**, Zada G Eds. <u>Advances in Endoscopic Skull Base Surgery</u>. Neurosurgical Focus 2015.
- 11. Laws E, Cohen-Gadol A, **Schwartz TH**, Sheehan J. <u>Transsphenoidal Surgery:</u>
 <u>Techniques Including Complication Avoidance and Management</u>. Cham, Switzerland, Springer 2017.
- 12. Wisoff J, Barker F, **Schwartz TH**, Fahlbusch R Eds. <u>Craniopharyngioma: Current and Emerging Treatment Modalities</u> Neurosurgical Focus 2016.
- 13. Singh H, Anand VK, Greenfield JG, **Schwartz TH.** Pediatric Endoscopic Skull Base Surgery. New York, NY, Thieme 2020.

Book Chapters, Reviews, Editorials and Commentaries

- 1. **Schwartz TH**, McCormick PM The retropleural approach to thoracic and thoracolumbar spine, in Neurosurgical Operative Atlas, ed. Rengachary SS, Wilkins RH AANS, New Hampshire, VT Vol. 8, 235-242, 1999
- 2. **Schwartz TH**. Epilepsy surgery. <u>www.healthology.com</u> 2001
- 3. **Schwartz TH**. Do cell phones cause brain tumors? www.healthology.com, www.healthology.com, www.healthology.com, www.healthology.com,
- 4. **Schwartz TH.** Chapter 52. Temporal approach, in <u>Fundamentals of Operative</u> <u>Techniques in Neurosurgery</u>, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 221-227, 2002.

- 5. **Schwartz TH.** Chapter 100. Temporal lobectomy and radical amygdalohippocampectomy, in <u>Fundamentals of Operative Techniques in Neurosurgery</u>, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York 504-512, 2002.
- 6. **Schwartz TH.** Chapter 117. Stereotactic endoscopic third ventriculostomy, in <u>Fundamentals of Operative Techniques in Neurosurgery</u>, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 597-603, 2002.
- 7. **Schwartz TH.** Chapter 178. Peri-insular functional hemispherotomy in <u>Fundamentals of Operative Techniques in Neurosurgery</u> eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 915-919, 2002.
- 8. **Schwartz TH.** Chapter 101. Subdural grid placement, in <u>Fundamentals of Operative Techniques in Neurosurgery</u> eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 504-512, 2002.
- 9. **Schwartz TH.** Chapter 103. Neocortical mapping and awake operations, in <u>Fundamentals of Operative Techniques in Neurosurgery</u> eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 525-532, 2002.
- 10. **Schwartz TH.** Chapter 108. Stereotactic thalamotomy or thalamic deep-brain stimulation, in <u>Fundamentals of Operative Techniques in Neurosurgery</u>, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 557-562, 2002.
- 11. **Schwartz TH.** Chapter 102. Stereotactic placement of temporal depth electrodes, in Fundamentals of Operative Techniques in Neurosurgery, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 520-524, 2002.
- 12. **Schwartz TH.** Chapter 104. Extratemporal nonlesional epilepsy surgery, in <u>Fundamentals of Operative Techniques in Neurosurgery</u>, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 533-537, 2002.
- 13. **Schwartz TH.** Chapter 107. Stereotactic microelectrode-guided pallidotomy; pallidal or subthalamic nucleus (STN) deep brain stimulation (DBS), in <u>Fundamentals of Operative Techniques in Neurosurgery</u>, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 550-556, 2002.
- 14. **Schwartz TH**. Epilepsy Surgery. A randomized, controlled trail of surgery for epilepsy. Epilepsy surgery Update, American Society for Stereotactic and Functional Neurosurgery. http://www.assfn.org/whatsnew/epilepsy_0402.asp 2002.
- 15. **Schwartz TH**, McCormick PC, Intramedullary tumors of the spinal cord, in <u>Textbook of Neurological Surgery</u>, ed. Batjer H, Loftus C, Lippincott-Raven, Philadelphia, PA 2002.

- 16. **Schwartz TH.** Corpus Callosotomy: Indications and Technique, in <u>Handbook of Stereotactic Neurosurgery</u>, ed. Schulder M. Marcel Dekker, Inc. New York, NY, 529-537, 2003.
- 17. **Schwartz TH,** McCormick PC. Chapter 312. Spinal cord tumors in adults, in <u>Yeoman's Neurological Surgery</u>, ed. Winn HR, W.B. Saunders Co. Philadelphia, PA 2003.
- 18. **Schwartz TH**, Gutin PH. Natural history of petroclival meningiomas (Comment). Neurosurgery 52;1:63, 2003.
- 19. **Schwartz TH,** Gutin PH. Radiation tolerance of functioning pituitary tissue in gamma knifesurgery for pituitary adenomas (Comment). Neurosurgery 52;2:316, 2003.
- 20. **Schwartz TH,** Gutin PH. The role of tumor size in radiosurgical management of patients withambiguous brain metastases (Comment). Neurosurgery 53;2:281, 2003.
- 21. **Schwartz TH,** Parsa AT, McCormick PC. Intramedullary ependymomas, in <u>Textbook of Neuro-Oncology</u>, ed. Berger MS, Prados MD. Elsevier Saunders, Philadelphia, PA, 497-500, 2005.
- 22. **Schwartz TH.** Intraoperative magnetic resonance imaging (iMRI) in the surgical treatment of epilepsy, in <u>Bioimaging in Neurodegeneration</u>, ed. Broderick P. Rahni DN, Kolodny EH. Humana Press Inc., Totoway, NJ, 177-191, 2005.
- 23. Bahar S, Suh M, Mehta A, **Schwartz TH.** *In vivo* intrinsic optical signal imaging of neocortical epilepsy, in <u>Bioimaging in Neurodegeneration</u>, ed. Broderick P. Rahni DN, Kolodny EH. Humana Press Inc., Totoway, NJ, 149-176, 2005.
- 24. **Schwartz TH.** MRI-negative temporal lobe epilepsy: is there a role for PET? Epilepsy Curr. 2005:5;3:118-119.
- Schwartz TH. Intraoperative electrocorticography has a limited role in the treatment of non-lesional medial temporal lobe epilepsy, in <u>Controversies in Epilepsy Surgery</u>, eds. Miller JW, Silbergeld DW, Marcel Dekker, Inc. 438-441, 2005.
- 26. **Schwartz TH.** Insular seizures: have we been missing the boat? Epilepsy Curr 5;4:147-148, 2005.
- 27. Suh M. Shariff S, Bahar S, Mehta AD, **Schwartz TH.** Intrinsic optical signal imaging of normal and abnormal physiology in animals and humans seeing the invisible. Clin Neurosurgery 52:135-149, 2005.
- 28. **Schwartz TH.** The terminal man from science fiction to therapy? Epilepsy Curr 5;6:1-3, 2005.

- 29. **Schwartz TH**. MR imaging and epilepsy-3T or not 3T. That is the question? Epilepsy Curr. 6:3;70-72, 2006.
- 30. **Schwartz TH**, Sisti MB. Stereotactic biopsy, in <u>Atlas of Neurosurgical Techniques</u>, eds. Sekhar L & Fessler R, Thieme, New York, 422-428, 2006.
- 31. **Schwartz TH**. Supercalifragilistic hemosiderosis: a rare and unusual complication that really sounds atrocious. Epilepsy Curr. 6:5:153-5, 2006.
- 32. Laufer I, Anand VK, Stieg PE, **Schwartz TH**. The history of endoscopic surgery of the sinuses, pituitary and anterior skull base, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 33. Anand VK, **Schwartz TH.** Practical anatomy of the sinuses and anterior skull base. in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 34. Tabaee A, **Schwartz TH,** Anand VK. Image-guidance in endoscopic skull base surgery, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 35. Anand VK, Schwartz TH. Surgical approaches to the anterior skull base, in Practical Endoscopic Skull Base Surgery, eds, Schwartz TH, Anand VK. Plural Publishing, San Diego, CA 2007.
- 36. **Schwartz TH**, Anand VK. The endoscopic, endonasal transsphenoidal approach to the sella, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 37. **Schwartz TH**, Anand VK. The endoscopic, transsphenoidal, transplanum, transtuberculum approach to the suprasellar cistern, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 38. Brown S, **Schwartz TH**, Anand VK. The transethmoidal, transorbital approach to the orbital apex, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 39. **Schwartz TH**, Anand VK. The endoscopic, transethmoidal, transcribiform approach to the anterior cranial fossa, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.

- 40. Tabaee A, **Schwartz TH,** Anand VK. Reconstruction after endoscopic skull base surgery, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 41. Greenfield J, Anand VK, **Schwartz TH**. Post-operative management of patients undergoing endoscopic transsphenoidal surgery, in <u>Practical Endoscopic Skull Base Surgery</u>, eds, **Schwartz TH**, Anand VK. Plural Publishing, San Diego, CA 2007.
- 42. **Schwartz TH.** Rolandic epilepsy surgery weighing the risks. Neurology Alert 25;5:36, 2007.
- 43. **Schwartz TH**. Treatment options for hypothalamic hamartomas no laughing matter. Epilepsy Curr. 7;3:72-74, 2007.
- **Schwartz TH**. Neurovascular coupling and epilepsy: hemodynamic markers for localizing and predicting seizure onset. Epilepsy Curr. 7;4:91-94, 2007.
- 45. **Schwartz TH.** Frontal lobe epilepsy surgery the importance of patient selection. Neurology Alert 25;8:60, 2007.
- 46. Plakantonakis D, **Schwartz TH.** Stereotactic placement of temporal depth electrodes, in <u>Fundamentals of Operative Techniques in Neurosurgery</u>, eds. Connelly ES, McKhann GM, Huang J, Choudhri TF. Thieme, New York, 2008.
- 47. Laufer I, Anand VK, **Schwartz TH**. Pituitary Macroadenomas: Intraoperative Magnetic Resonance Imaging and Endonasal Endoscopy, in <u>Cancer Imaging</u>, ed. Hayat MA. Elsevier Science/Academic Press, pp 575-579, 2007.
- 48. Plakantonakis D, Shariff S, Kandula P, **Schwartz TH.** Depth electrodes in invasive epilepsy monitoring, in <u>Operative Techniques in Epilepsy Surgery</u>, eds. Baltuch G, Villemure J-G. Thieme, New York, 2009.
- 49. Suh M, Ma H, Zhao M, Geneslaw A, **Schwartz TH**. Intraoperative optical imaging of human cortex, in <u>Imaging the Brain with Optical Methods</u> Roe A. W. ed, Springer, Heidelberg 2009.
- 50. Ma H, Suh M, Zhao M, Perry C, Geneslaw A, **Schwartz TH.** Optical spectroscopic imaging of the human brain clinical applications, in <u>Clinical Brain Mapping</u> Yoshor D, Mizrahi E. eds. McGraw-Hill Medical, 2010.
- 51. **Schwartz TH.** Cortical stimulation mapping what's old is new again. Neurology Alert (2009).

- 52. Fraser JF, **Schwartz TH,** Kapllitt MG. Utilization of BrainLAB neuronavigation in neurosurgery, in <u>Textbook of Stereotactic and Functional Neurosurgery.</u> Gildenberg P, Lozano A, Tasker R. ed., Springer, 2009.
- 53. **Schwartz TH.** Application of neuroendoscopy to intraventricular lesions (comment). Neurosurgery 62;2:SHC597-8, 2008.
- 54. **Schwartz TH**. Long-term seizures and quality of life after epilepsy surgery compared with matched controls (comment). Neurosurgery 62:2:334, 2008.
- 55. **Schwartz TH.** Localization of cerebrospinal fluid leaks by gadolinium-enhanced magnetic resonance cisternography: a 5-year single-center experience (comment). Neurosurgery 62;3:589, 2008.
- 56. **Schwartz TH**. Endoscopic sublabial transmaxillary approach to the rostral middle fossa (comment). Neurosurgery 62;ONS1:ONS36, 2008.
- 57. **Schwartz TH.** Endoscopic endonasal pituitary transposition for a transdorsum sellae approach to the interpeduncular cistern (comment). Neurosurgery 62;ONS1:ONS73, 2008.
- 58. **Schwartz TH.** Endoscope-controlled microneurosurgery to treat middle fossa epidermoid cysts. Technical case report (comment). Neurosurgery 62;ONS1:107, 2008.
- 59. Fraser J, **Schwartz TH**. Blood supply to the intracavernous cranial nerves: comparison of the endoscopic and microsurgical perspectives (comment) Neurosurgery 62; ONS Suppl 2; ONS205-311, 2008
- 60. **Schwartz TH.** Pure Endoscopic endonasal approach for pituitary adenomas: early surgical results in 200 patients and comparison with previous microsurgical series (comment). Neurosurgery 62;5:ONS1016, 2008.
- 61. **Schwartz TH.** Endoscopic endonasal resection of anterior cranial base meningiomas (comment). Neurosurgery 63;1:52, 2008.
- 62. **Schwartz TH.** Endoscopic third ventriculostomy in idiopathic normal pressure hydrocephalus: an Italian multicenter study (comment). Neurosurgery 63;1:68, 2008.
- 63. **Schwartz TH**. Endoscopic reconstruction of the cranial base using a pedicled nasoseptal flap (comment). Operative Neurosurgery 63:1:ONS52, 2008.
- 64. **Schwartz TH.** Three-dimensional visualization of neurovascular compression: presurgical use of virtual endoscopy created from magnetic resonance imaging (comment). Operative Neurosurgery 63:1:ONS139, 2008.

- 65. **Schwartz TH.** Expanded endoscopic endonasal approach for treatment of clival chordomas: early results in 12 patients (comment). Neurosurgery 63;2:308, 2008.
- 66. **Schwartz TH.** Endoscopic endonasal odontoidectomy in a patient affected by down syndrome: technical case report (comment) Neurosurgery 63;2:373.
- 67. **Schwartz TH.** Visual field defects in selective amygdalohippocampectomy for hippocampal sclerosis: the fate of Meyer's loop during transsylvian approach to the temporal horn (comment). Neurosurgery 63:3;514, 2008.
- 68. **Schwartz TH,** Endoscopic transconjunctival surgical approach to the optic nerve and medial intraconal space: a cadaver study (comment). Operative Neurosurgery 63:2:ONS 209, 2008.
- 69. **Schwartz TH.** Endoscopic transnasal versus open transcranial cranial base surgery: the need for a serene assessment (comment). Operative Neurosurgery 63;2:ONS 242, 2008.
- 70. **Schwartz TH.** The endonasal microscopic approach for pituitary adenomas and other parasellar tumors: a 10-year experience (comment). Operative Neurosurgery 63;2:ONS 256, 2008.
- 71. **Schwartz TH.** Efficacy of endoscopic third ventriculostomy in fourth ventricular outlet obstruction (comment). Neurosurgery 63;5:914, 2008.
- 72. Fraser JF. **Schwartz TH.** Endoscopic endonasal approach for clival chordomas (comment). Neurosurgery 64;2:277, 2009.
- 73. **Schwartz TH.** The front door to Meckel's cave: an anteromedial corridor via expanded endoscopic endonasal approach technical considerations and clinical series (comment) Operative Neurosurgery 64;ONS1:82-83, 2009.
- 74. **Schwartz TH.** Expanded endoscopic endonasal approach for anterior cranial base and suprasellar lesions: indications and limitations [comment]. Neurosurgery 64; 4:687, 2009.
- 75. **Schwartz TH.** Microsurgical and endoscopic anatomy of the vidian canal [comment]. Neurosurgery 64;ONS Suppl 2;ONS 411, 2009.
- 76. **Schwartz TH**. Microscope and endoscopic extracranial approaches to the cavernous sinus: anatomic study [comment]. Neurosurgery 64;ONS Suppl 2:ONS421-422, 2009.
- 77. **Schwartz TH.** Endoscopic image-guided transoral approach to the craniovertebral junction: an anatomic study comparing surgical exposure and surgical freedom obtained with the endoscope and the operating microscope [comment] Neurosurgery 64;ONS Suppl2: ONS 443, 2009.
- 78. **Schwartz TH.** Cortical dyplasia: complete resection correlates with outcome ... But, complete resection of what? Epilepsy Curr. 9;4:100-2, 2009.

- 79. Placantonakis D, **Schwartz TH.** Localization in Epilepsy in <u>Neurologic Clinics of North America</u> Vol 27, Num 4 Schachter S ed. Elsevier, pp1015-1030, 2009.
- 80. **Schwartz TH**. Primary obstruction of the fourth ventricle outlets: neuroendoscopic approach and anatomic description. [comment]. Neurosurgery 65;6:1085-6, 2009
- 81. Roth J, **Schwartz TH**. Endoscopic endonasal transclival approach and retrosigmoid approach to the clival and petroclival regions [comment]. Operative Neurosurgery 65;1:ONS51, 2009.
- 82. **Schwartz TH.** Endoscopic transnasal resection of ectopic esthesioneuroblastoma in the pterygopalatine fossa: technical case report [comment] Operative Neurosurgery 65;1:ONS112, 2009.
- 83. Nyquist GG, Anand VK, **Schwartz TH**. Transplanum, transtuberculum approach, in <u>Transnasal Endoscopic Skull Base and Brain Surgery: Tips and Pearls</u>, Stamm A, ed. Thieme pp 193-200, 2011.
- 84. Singh A, Anand VK, **Schwartz TH.** Successful management of endoscopic skull base surgery complications in <u>Transnasal Endoscopic Skull Base and Brain Surgery: Tips and Pearls</u>, Stamm A, ed. Thieme pp 396-401. 2011.
- 85. Scheinberg M, Cobb W, Anand V, **Schwartz TH**. Microscopic versus endoscopic transnasal pituitary surgery. <u>Current Opinion in Otolaryngology and Head and Neck Surgery</u>. <u>Lippincott</u>, Williams & Wilkins 18;1:8–14, 2010
- 86. Fraser J, Anand VK, **Schwartz TH.** Endoscopic transsphenoidal surgery in <u>Core</u>
 <u>Techniques in Operative Neurosurgery</u> Jandial R, McCormick P, Black P eds. Elsevier,
 Philadelphia, PA, pp 328-338., 2011.
- 87. Souweidane MM, Greenfield JP, **Schwartz TH**. Endoscopic approach to intraventricular brain tumors. <u>Schmidek & Sweet's Operative Neurosurgical Techniques: Indications, Methods and Results</u>. Quinones-Hinojosa A, Ed. Elsevier, Philadelphia, PA pp 351-356, 2011.
- 88. **Schwartz TH.** Endoscopic approach to the infratemporal fossa: anatomic study [comment]. Neurosurgery 66;1:202, 2010.
- 89. Moshel Y, Scheinberg M, Anand V, **Schwartz TH**. Endoscopic closure of CSF leaks in Neuroendoscopy Current Status and Future Trends. Spyros S. ed.Springer London, 205-211, 2014.
- 90. Moshel Y. **Schwartz TH.** Multiport minimally invasive neurosurgery. How many ports are too many? World Neurosurgery 73(6):632-3, 2010.
- 91. **Schwartz TH**. Epilepsy surgeons rather than vascular neurosurgeons should operate on cavernous malformations that casue seizures a modest proposal. Epi Curr 10;3:59-60, 2010.
- 92. Moshel Y, Anand VK, Hartl R, **Schwartz TH**. Extended endonasal approaches to the craniovertebral junction. <u>Surgery of the Craniovertebral Junction</u>, Dickman C, Spetzler R, Sonntag V, eds Thieme, 2nd edition 2012.

- 93. Moshel Y. **Schwartz TH.** Endoscopic assisted approaches to the craniovertebral junction lateral versus anterior. World Neurosurgery 74;23:266-267, 2010.
- 94. **Schwartz TH.** Predicting the unpredictable stereotactic radiosurgery and temporal lobe epilepsy. Epi Curr 10;6:150-152, 2010.
- 95. Moshel YA, **Schwartz TH**. Endoscopic transnasal versus transoral approaches to the craniovertebral junction [comment]. World Neurosurgery 74;6:568-569, 2010.
- 96. Raper DMS, Komotar RJ, Fraser JF, Anand VK, Moore N, **Schwartz TH**. Skull base chordomas: endoscopic endonasal approach, <u>Tumors of the Central Nervous System</u>. Hayat MA ed. Springer pp 185-194, 2012
- 97. Luther N, **Schwartz TH.** Reducing the incidence of hydrocephalus in intraventricular hemorrhage [comment]. World Neurosurgery 75;2:209-10, 2011.
- 98. Singh A, Roth J, Anand VK, **Schwartz TH.** Anatomy of the pituitary gland and sella. <u>Endoscopic Pituitary Surgery. A Comprehensive Guide</u>. **Schwartz TH,** Anand VK, eds. Thieme, New York, 2011.
- 99. Leng LZ, Anand VK, **Schwartz TH.** Endoscopic transsphenoidal approach to the sella. Endoscopic Pituitary Surgery. A Comprehensive Guide. **Schwartz TH,** Anand VK, eds. Thieme, New York, 2011.
- 100. Brown S, Anand VK, **Schwartz TH.** 3D stereoendoscopic pituitary surgery. <u>Endoscopic Pituitary Surgery</u>. A Comprehensive Guide. **Schwartz TH,** Anand VK, eds. Thieme, New York, 2011.
- Hoffstetter C, Anand VK, Schwartz TH. Extended transsphenoidal versus craniotomy for giant pituitary adenomas. <u>Endoscopic Pituitary Surgery. A Comprehensive Guide</u>. Schwartz TH, Anand VK, eds. Thieme, New York, 2011.
- 102. Tabaee A, Anand VK, **Schwartz TH.** The role of stereotactic navigation in endoscopic pituitary surgery. <u>Endoscopic Pituitary Surgery. A Comprehensive Guide</u>. **Schwartz TH,** Anand VK, eds. Thieme, New York, 2011.
- 103. Laufer I, Anand VK, Schwartz TH. Limited utility of intraoperative MRI in endoscopic pituitary surgery. <u>Endoscopic Pituitary Surgery</u>. A Comprehensive Guide. Schwartz TH, Anand VK, eds. Thieme, New York, 2011.
- 104. Greenfield JG, **Schwartz TH.** Neurocritical care management of patients after endonasal endoscopic transsphenoidal pituitary surgery. <u>Endoscopic Pituitary Surgery. A</u>
 Comprehensive Guide. **Schwartz TH,** Anand VK, eds. Thieme, New York, 2011.

- 105. Fraser J, **Schwartz TH.** Anterior communicating artery aneurysm clipped through a transnasal endoscopic approach: Technical note [comment]. Neurosurgery (in press).
- 106. Komotar R, **Schwartz TH.** The utility of computer-based modeling in endoscopic skull base surgery [comment]. World Neurosurgery 75;1:39-40, 2011.
- 107. **Schwartz TH.** Predicting the unpredictable: stereotactic radiosurgery and temporal lobe epilepsy. Epilepsy Curr. 10;6;150-2.
- 108. Ogden AT, Schwartz TH, McCormick PC. Chapter 309. Spinal cord tumors in adults, in Yeoman's Neurological Surgery, 6th ed. ed. Winn HR, Elsevier. Maryland Heights, MO 2010.
- 109. Hofstetter C, Hartl R, **Schwartz TH.** Treatment of pituitary adenomas in Nigeria-Surgical and social challenges [comment] World Neurosurgery 77;5/6, 593-786, 2012.
- 110. Woodworth G, **Schwartz TH.** Anatomic lines and extent of exposure in expanded endoscopic approaches to the cranio-vertebral junction [comment]. World Neurosurgery (in press).
- 111. **Schwartz TH,** Anand VK. Endonasal transplanum approach to the anterior cranial fossa, in Skull Base Surgery Volume eds. Snyderman C, Gardner P, in <u>Master Techniques in Otolaryngology Head and Neck Surgery</u> ed Myers EN, Lippincott Williams & Wilkins 2014.
- Hofstetter C, Hartl R, **Schwartz TH.** Can you separate the tool from the fool? [comment] World Neurosurgery 77;3-4:459-6, 2012
- 113. McCoul E, **Schwartz TH**, Anand VK. Endoscopic approaches to the skull base. <u>Head and Neck Surgery</u>. Nguyen S, Day T, Nathan C-A, Har–El G, eds. Thieme 2013
- 114. Cobb W, **Schwartz TH.** Surgical treatment of brain metastases. Neurology Alert 30;4:29-30, 2011.
- Singh A, Anand VK, Schwartz TH. Endoscopic approaches to the pterygopalatine and infratemporal fossae, in <u>Rhinology</u>. <u>Disease of the Nose</u>, <u>Sinuses and Skull Base</u>, Kennedy DW, Hwang PH eds. Thieme 2012.
- 116. Anand VK, **Schwartz TH**. Non-vascularized repair of small dural defects, in Skull Base Surgery Volume eds. Snyderman C, Gardner P, in <u>Master Techniques in Otolaryngology Head and Neck Surgery</u> ed Myers EN, Lippincott Williams & Wilkins, 2014.

- 117. Yang T, **Schwartz TH.** Endoscopic versus transcranial resection of craniopharyngiomas, in <u>Controversies in Neuro-Oncology: Best Evidence Medicine for Brain Tumor Surgery</u>, Quinones-Hinojosa, A. ed, Thieme, New York, NY, 2013.
- 118. Yang T, **Schwartz TH.** Skull base approaches in <u>Pituitary Disorders: Diagnosis and Management</u>. Laws E, Ezzat S, Asa S, Rio L, eds. John Wiley and Son, Ltd. Oxford, England, 2013.
- 119. Cobb B, **Schwartz TH.** Endoscopic endonasal resection of giant pituitary macroadenomas in <u>Comprehensive Multimedia Atlas of Neurosurgery: Nuances of Technique and Complication Avoidance</u> Quinones-Hinojosa, A. ed. Elsevier 2016
- 120. Kandasamy J, **Schwartz TH.** Endoscopic endonasal resection of sellar/suprasellar craniopharyngiomas in <u>Comprehensive Multimedia Atlas of Neurosurgery: Nuances of Technique and Complication Avoidance</u> Quinones-Hinojosa, A. ed. Elsevier 2016
- 121. **Schwartz TH.** An eyebrow for an eyebrow and a nose for a nose [comment] World Neurosurgery 82;1-2:e97-9, 2014.
- 122. **Schwartz TH.** A role for centers of excellence in transsphenoidal surgery [comment]. World Neurosurgery 80;3-4:270-1, 2013.
- 123. Zhao M, Ma H, **Schwartz TH**. Seizure prediction using optical measurement of blood flow and oxygenation. Recent Advances in Predicting and Preventing Epileptic Seizures Tetzlaff R, Elger CE, Lehnertz K, eds, World Scientific, 2011.
- 124. **Schwartz TH.** Mirror of the soul Neuro-opthalmology. Review manual [Book Review]. World Neurosurgery 79;5-6;605-606, 2013.
- 125. **Schwartz TH.** The high road or the low road [comment]. World Neurosurgery 81;2:281-2, 2014.
- 126. Khan OH, Raithatha R, Anand VK, **Schwartz TH**. Endoscopic surgery of the sella and suprasellar region. In <u>Sataloff Comprehensive Textbook of Otolaryngology</u>, Tabaee A, Fried Eds, Jaypee Brothers Medical Publishers, Philadephia, PA 2015.
- 127. Ma H, Zhao M, Harris S, **Schwartz TH.** Simultaneous multi-wavelength optical imaging of hemodynamic and neuronal activity, in <u>NeuroMethods: Neurovascular Coupling Methods</u>, Springer 2014
- 128. Zhao M , Ma H, Harris S, **Schwartz TH.** Multi-spectral imaging of blood volume, metabolism, oximetry and light scattering, in <u>NeuroMethods: Neurovascular Coupling Methods</u>, Springer 2014

- 129. Moliterno Gunel J, Greenfield JG, Souweidane MM, **Schwartz TH.** Endoscopic approaches, in <u>Textbook of Neuro-Oncology</u>, Berger MS, Prados M, eds Elsevier, Saunders 2005.
- 130. **Schwartz TH**. Intraoperative MRI and pituitary surgery [Editorial]. Journal of Neurosurgery 120;342-345, 2014.
- 131. Raza S, **Schwartz TH.** Endoscopic approaches to lesions in the cavernous sinus, in Minimal Access Skull Base Surgery: Open and Endoscopic Assisted Approaches Boahene K. Ed. Jaypee Publishing 2016
- 132. **Schwartz TH.** Endoscope-assisted 5-ALA imaging [comment]. World Neurosurgery 82(1-2):e117-8, 2014.
- 133. **Schwartz TH.** The endoscope and the giant macroadenoma: a match made in heaven [comment] World Neurosurgery 82(1-2):e119-20, 2014.
- 134. McCrea HJ, Yang T, **Schwartz TH.** Controversies. Endoscopic Approach, in Craniopharyngiomas: A Comprehensive Guide to Diagnosis, Treatment and Management. Eds. Evans JJ, Kenning TJ, Elsevier Press 2015.
- 135. **Schwartz TH.** The shifting economic demands in health care. What is a pituitary surgeon to do? [comment] World Neurosurgery 83(1):27-8, 2015.
- 136. Patrona A, Anand VK, **Schwartz TH**. Endoscopic transsphenoidal resection of a pituitary macroadenoma, in <u>The Masters Neurosurgical Techniques</u>, Samandouras G, Kitchen N, Eds. Thieme (submitted for publication).
- 137. Patrona A, Anand VK, **Schwartz TH**. Endoscopic endonasal transsphenoidal resection of planum and tuberculum menigniomas, in <u>The Masters Neurosurgical Techniques</u>, Samandouras G, Kitchen N, Eds. Thieme (submitted for publication).
- 138. Patrona A, Anand VK, **Schwartz TH**. Endoscopic endonasal transsphenoidal resection of craniopharyngiomas, in <u>The Masters Neurosurgical Techniques</u>, Samandouras G, Kitchen N, Eds. Thieme (submitted for publication).
- 139. Raza S, **Schwartz TH.** Multilayer reconstruction during endonasal skull base surgery. How much is necessary? [comment] World Neurosurgery 83;2:138-9, 2015.
- 140. Raza S, **Schwartz TH.** How to achieve the best possible outcomes in retroinfundibular craniopharyngiomas [comment] World Neurosurgery 82;5:614-6, 2014.
- 141. Raza S, Anand VK, **Schwartz TH.** Chordomas: Endoscopic Approach in <u>Atlas of Neurosurgical Techniques-Cranial Surgery 2nd Edition</u>, Sekhar L, Fessler R. eds 2016.

- 142. Raza S, **Schwartz TH.** Malleable endoscope increases surgical freedom when compared to rigid endoscope in endoscopic endonasal approaches to the parasellar region [comment] Neurosurgery 10;3:399, 2014.
- 143. **Schwartz TH.** Does the blood supply to the optic chiasm dictate the endonasal corridor? [comment] Journal of Neurosurgery 122:163-5, 2015.
- 144. **Schwartz TH.** Should endonasal endoscopic surgery be used for olfactory groove meningiomas? [comment] Neurosurgical Focus 37(4): E9, 2014
- 145. Patel KS, Raza SM, McCoul ED, Patrona A, Anand VK, Schwartz TH. Quality of Life after endoscopic resection of craniopharyngiomas. <u>Proceedings of European Association</u> of Neurological Surgeons. Medimodo, Italy 2015
- 146. Zacharia BE, **Schwartz TH.** Diffusion of neuroendoscopy, Guided by the light [comment] World Neurosurgery 83;5:752-3, 2015.
- 147. Zacharia BE, Amine M, Anand VK, **Schwartz TH.** Endoscopic endonasal management of craniopharyngioma. In <u>Otolaryngologic Clinics of North America</u>. Endoscopic Cranial <u>Base and Pituitary Surgery</u>, Sindwani R, Woodard T, Recinos P eds. 49(1):201-12, 2016.
- 148. Raza SM, Anand VK, **Schwartz TH**. Endoscopic endonasal resection of trigeminal schwannomas, in <u>Neurosurgery Clinics of North America</u>. Endoscopic Skull Base <u>Surgery</u> Prevedello D, ed. Elsevier 26(3):473-9, 2015.
- 149. Amine M, Dziedzic T, Hong Y, Anand VK, **Schwartz TH**. Jugular foramen approach, in Endoscopic approaches to the paranasal sinuses and the skull base: a step-by-step anatomic dissection guide. Alobid I, Bernal-Sprekelson M eds., Thieme 2017
- 150. Silva D, Attia M, Schwartz TH. Letter to the Editor, Endoscopic endonasal posterior clinoidectomy. Journal of Neurosurgery 122:473-481, 2015.
- 151. Margetis K, **Schwartz TH.** Response Letter to the Editor. Journal of Neurosurgery 123;2:475-476, 2015.
- 152. **Schwartz TH**. Does chiasmatic blood supply dictate endonasal corridors? Invited Editorial. Journal of Neurosurgery 122;5:1163-4, 2015.
- 153. Evins AI, Tebo CC. **Schwartz TH.** Response Letter to Editor. Journal of Neurosurgery 122;2:477-8, 2015
- 154. **Schwartz TH**, Banu MA, Anand, VK. Is endonasal endoscopic surgery the best initial

- approach for the majority of olfactory groove meningiomas? Response Letter to Editor. Journal of Neurosurgery 2015.
- 155. **Schwartz TH**, Anand VK. Minimal access versus minimally invasive. Response to Letter to the Editor. Journal of Neurosurgery Peds 2015.
- 156. Singh H, Hussain I, **Schwartz TH.** Endoscopic assisted supraorbital keyhole approach, in Multiportal Endoscopic Approaches to the Skull Base, Castelnuovo P ed. 2016.
- 157. Singh H, Essayed WI, Hussain I, Yang K, Anand VK, **Schwartz TH**. Endoscopic transsphenoidal pituitary surgery. Results and Complications, In, <u>Transsphenoidal Surgery Complication Avoidance and Management Techniques</u>. Laws ER, Cohen-Gadol AA, Schwartz TH, Sheehan J. eds. Springer 2017
- 158. Singh H, Essayed WI, **Schwartz TH,** Endonasal endoscopic resection of planum sphenoidale lesions, In Nakji P, Zaidi H eds. <u>Controversies in Neuroendoscopy.</u> Thieme 2018.
- 159. **Schwartz TH**. "Surgical resection and interstitial 125I brachytherapy for high-grade meningioma: A 25-year series" [comment] Neurosurgery 80;3:416, 2017.
- 160. Singh H, Salam S, **Schwartz TH.** "Endocrine silent pituitary tumors", in Surgical Neuro-Oncology, Ed Lonser R, Elder B, In, Neurosurgery By Example, Ed, Selden N. Oxford University Press 2019.
- 161. Singh H, Schwartz TH. "A case of gigantism" in <u>The Art of Neuro-Endocrinology: A Case Based Approach to Medical Decision-Making</u>, Blevins L, Ed. Nova Science Publishers 2017.
- 162. Al-Mahfoudh R, Singh H, **Schwartz TH**. "Endoscopic endonasal transmaxillary approach to the vidian canal and Meckel's cave" in <u>Operative Cranial Neurosurgical Anatomy</u> Gagliardi F, Gragnaniellp C, Caputy AJ, Mortini P. eds. Thieme 2018.
- 163. **Schwartz, TH.** Response to letter 16-1003. Journal of Neurosurgery 2018.
- 164. Singh H, Essayed WI, **Schwartz TH**. "Endoscopic technology and repair techniques", in <u>Handbook of Neurology: Meningiomas</u>, McDermott MW, Theodosopoulos PV eds. 170:217-225, 2020.
- Bulent S, **Schwartz TH.** "Suprasellar pathology" in <u>Endoscopic and Keyhole Cranial Base Surgery</u>. Evans J, Kenning T, Farrell C, and Kshettry V. Eds., Springer 2019.
- 166. **Schwartz TH**, Banu MA, Anand VK. Response. Journal of Neurosurgery 124;4:1140-1, 2016.

- 167. Bulent S, **Schwartz TH.** Visual outcome after adenoma surgery. Comment. Neurology India 64;6:1254-1255, 2016.
- 168. **Schwartz TH.** Recurrent endonasal craniopharyngioma surgery. Response to letter. Journal of Neurosurgery 2018.
- 169. Goel G, **Schwartz TH.** Commentary on the McConnell's capsular arteries and its relevance in endoscopic endonasal approach to the sellar region. Operative Neurosurgery 14;2:177, 2018.
- 170. Goel G, Anand VK, **Schwartz TH.** Endonasal endoscopic transplanum/transtuberculum approach to tuberculum sella and planum sphenoidale meningiomas, in <u>Transnasal Endoscopic Skull Base and Brain Surgery: Tips and Pearls</u>, Stamm A, ed. Thieme (submitted).
- 171. Forbes J. Anand VK, **Schwartz TH**. "Controversies in the management of chondrosarcomas of the cranial base" In <u>Controversies in Skull Base Surgery</u>. Mooney M, Little A. Eds. Thieme 2019.
- 172. Morgenstern PF, Forbes J, **Schwartz TH.** "Follow-up and adjunctive modalities" In. Meningiomas of the Skull Base. Cappabianca P, Solari D, Eds. Thieme 2018.
- 173. Magill ST, **Schwartz TH,** Theodosopoulos PV, McDermoot MW. Brachytherhapy for Meningiomas, in <u>Meningiomas. Handbook of Neurology</u>, McDermott MW, Theodosopoulos PV eds. 170:303-307, 2020
- 174. Banu M, Anand VK, Greenfield JG, **Schwartz TH.** Anatomy of the developing pediatric skull base, in <u>Pediatric Endoscopic Skull Base Surgery</u>, Singh H, Anand VK, Greenfield JG, Schwartz TH. Eds. Thieme (in press).
- 175. Singh H, Anand VK, **Schwartz TH.** Closure techniques for the pediatric skull base, in <u>Pediatric Endoscopic Skull Base Surgery</u>, Singh H, Anand VK, Greenfield JG, Schwartz TH. Eds. Thieme (in press).
- 176. Singh H, Greenfield JG, Almodovar GM, Anand VK, **Schwartz TH.** Endonasal corridors and approaches, in <u>Pediatric Endoscopic Skull Base Surgery</u>, Singh H, Anand VK, Greenfield JG, Schwartz TH. Eds. Thieme (in press).
- 177. Essayed WI, Rodhouane K, **Schwartz TH**. Singh H. Instrumentation, in <u>Pediatric Endoscopic Skull Base Surgery</u>, Singh H, Anand VK, Greenfield JG, Schwartz TH. Eds. Thieme (in press).

- 178. Dayani F, Medress Z, Anand VK, **Schwartz TH**, Singh H. Patient positioning and operating room set-up, in <u>Pediatric Endoscopic Skull Base Surgery</u>, Singh H, Anand VK, Greenfield JG, Schwartz TH. Eds. Thieme (in press).
- 179. Soneru CP, Riley CA, Tabaee A, Anand VK, **Schwartz TH**. Endoscopic approaches to the pterygopalatine and infratemporal fossa, in <u>Rhinology</u>. <u>Disease of the Nose</u>, <u>Sinuses and Skull Base</u>, 2nd edition, Kennedy DW, Hwang PH eds. Thieme (in press).
- 180. Riley CA, Soneru CP, Tabaee A, Anand VK, **Schwartz TH.** Successful management of endoscopic skull base surgery complications in <u>Transnasal Endoscopic Skull Base and Brain Surgery: Tips and Pearls 2nd Edition, Stamm A, ed. Thieme (in press).</u>
- 181. Forbes JA, Dobri G, **Schwartz TH,** Greenfield JG. Postoperative care for pediatric skull base patients: the neurosurgical perspective, in <u>Pediatric Endoscopic Skull Base Surgery</u>, Singh H, Anand VK, Greenfield JG, Schwartz TH. Eds. Thieme (in press).
- 182. Forbes JA, Riley CA, Kacker A, **Schwartz TH.** Tumors of the central skull base. Dorsum Sellae in <u>Strategem in Skull Base Surgery. Decision making to Optimize Approach.</u> Jean W. Ed. Thieme, New York pp 129-134, 2019
- 183. **Schwartz TH.** The facts speak for themselves. Response to comment. J Neuosurg (submitted for publication).
- 184. Arko L, **Schwartz TH.** Combined endoscopic endonasal, transethmoidal, transcribiform approach with endoscopic assisted supraorbital craniotomy, in <u>Integrated Management of Complex Intracranial Lesions: Open, Endoscopic and Keyhole Techniques</u>, Agarwal V. Ed. Cambridge University Press (in press).
- 185. Goel G, Greenfield JG, Souweidane MM, **Schwartz TH.** Transcallosal and endoscopic approach to intraventricular brain tumors, in <u>Schmidek & Sweet: Operative Neurosurgical Techniques 7th Ed.</u> Quinones A Ed. Elsevier (in press).
- 186. Wernicke AG, Mahase SS, **Schwartz TH.** Brachytherapy for brain metastases, in <u>Central Nervous System Brain Metastases</u>: <u>Diagnosis and Treatment</u>, in Ramakrishna R, Knisely J, Magge R, Baaj A, Eds. Springer (in press).
- 187. Caribe R, Anand VK, **Schwartz TH**. Transclival approach to the skull base and posterior fossa In <u>Atlas of Skull Base Surgery</u>, Jayashankar N, Narayanan P, Eds. Thieme India (in press).
- 188. Arko L, **Schwartz TH.** Endoscopic orbital surgery: The neurosurgeons perspective, in Endoscopic Surgery of the Orbit Sindwani R, Ed. Elsevier (in press).

- 189. Knisely J, Ramakrishna R, **Schwartz TH.** Letter to the Editor. How safe, really, is jugular paraganglioma radiosurgery? Journal of Neurosurgery (in press).
- 190. Arko L, **Schwartz TH.** Commentary: near infrared optical contrast of skull base tumors during endoscopic endonasal surgery [comment]. Operative Neurosurgery (in press).
- 191. Mahase SS, Navrazhina K, **Schwartz TH**, Parashar B, Wernicke G. Intraoperative brachytherapy for resected brain metastases in <u>Central Nervous System Metastases</u>:

 <u>Diagnosis and Treatment</u> in, Ramakrisha R, Knisely J, Magge R, Baaj A. Eds. Springer International (in press).
- 192. Caribe R, **Schwartz TH.** Endoscopic minimally invasive approaches to occiput-C1-C2 in 10-Step Techniques for Minimally Invasive Spine Surgery and Navigation. Hartl R, Ed. Thieme (in press)
- 193. **Schwartz TH**. Suprasellar tumors, in, <u>International Comparisons in Neurosurgical Management: Intrinsic and Skull Base Tumors</u>, Chaichana K, Quinones-Hinojosa A Eds, Elsevier (in press)
- 194. Forbes JA, Ordóñez-Rubiano EG, **Schwartz TH**. Letter of Response. Intraventricular Craniopharyngiomas. <u>Journal of Neurosurgery</u> (in press).
- 195. Almeida JP, Anand VK, **Schwartz TH.** Endoscopic endonasal repair of CSF leaks following sellar, suprasellar surgery and spontaneous lateral sphenoid sinus encephaloceles, In Castelnuovo P, Carau R, Casiano R, Al Qahtani A. Eds. <u>CSF Rhinorrhea: Pathophysiology, Diagnosis and Skull Base Reconstruction</u>. Springer (in press).
- 196. Omay SB, Schwartz TH. Endoscopic and minimally invasive meningioma surgery, In, Moliterno Gunel J, Omuro A. Eds, <u>Meningiomas, Comprehensive Strategy for Management Springer</u> (in press).
- 197. Uribe R, Kirnaz S, **Schwartz TH**. MIS Endoscopic approaches for OC-C!-C2 pathology In Hartl R, Navarro-Ramirez, R. Eds. <u>10 Step Techniques for Minimall Invasive Spine Surgery and Navigation</u>. Thieme (in press).
- 198. Youngerman BE, **Schwartz TH**. Editorial: quality of life after anterior skull base surgery. <u>Acta Neurochirurgica</u> 1;12:2539-2540, 2020.
- 199. Godil S, **Schwartz TH**. Endoscopic approaches for extrinsic and skull base tumors. Winn HR ed., <u>Youmans Neurological Surgery</u> 8th Edition. Elsevier (in press).
- 200. Bander E, **Schwartz TH**. Response to: Letter to the editor regarding: "Spontaneous regression of a clival chordoma. Case report". <u>Acta Neurochirurgica</u> 162;2:441, 2020.

- 201. Chae JK, Winston G, Guadix SW, Younus I, Greenfield JP, **Schwartz TH**, Apuzzo MLJ, Pannullo SC. Letter: COVID-19 impact on the medical student path to neurosurgery Neurosurgery 87;2:E232-E233, 2020.
- 202. Rapoport BI, Dobri GA **Schwartz TH.** Pituitary Surgery. <u>Mulholland and Greenfield's Surgery: Scientific Principles & Practice</u>, 7th Edition. Wolters Kluwer (in press).
- 203. Rapoport BI, McDermott MM, **Schwartz TH.** Time to move beyond the Simpson scale in meningioma surgery [Letter to the Editor]. <u>Journal of Neurosrugery</u> (in press).
- 204. Kuo P, Anand VK, **Schwartz TH**, Mack PF. Anesthetic Considerations, in <u>Management of Sinonasal and Ventral Skull Base Malignancies</u>. Eloy JA Ed, Springer Nature (in press).
- 205. Michael AP, Ray A, Tabaee A, **Schwartz TH**. Endoscopic reconstruction of middle cranial fossa defects, in <u>Cerebrospinal Fluid Rhinorrhea</u>. Sindwani R, Roxbury CR, eds. Elsevier (in presss).
- 206. Ray A, McCoul E, **Schwartz TH**, Anand VK. Endoscopic approaches to the anterior skull base. <u>Head and Neck Surgery 2nd Edition</u>. Nguyen S, Day T, Nathan C-A, Har–El G, eds. Thieme (in press)
- 207. Henderson F Jr., Anand VK, **Schwartz TH**. Managing intracranial arterial injury during endoscopic endonasal skull base surgery, in <u>100 Complications of ENT and Skull base</u> Surgery- Each case from different Surgeons around the Globe Thieme, (in press)
- 208. Schwartz TH, Hernderson F Jr, Di Somma A, Kong S-S, de Notaris M, Ensenat J, MoeK. Transorbital surgery. Leap of Faith? World Neurosurgery (in press).
- 209. Schwartz TH, McDermott MW. Response to Lettter to Editor. The Simpson Grade.
 Abandon the Scale bu Presreve the Message Journal of Neurosurgery (in press).

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 far 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. "The Transorbital approach" NASBS Skull Base Surgery Virtual Workshop, Dec 9, 2021
- 2. "The Transorbital approach. Graded Learning Curve" Wash U. Skull Base Dissection Course, St. Louis, MO, Dec 4, 2021.
- 3. "Minimally invasive approaches to the cavernous sinus" Keynote Lecture, Neuroendoscopy Society of India Webinar Series, Nov. 20, 2021
- 4. "Minimally invasive skull base surgery. Lessons learned over 20+ years. Neursourgery Grand Rounds, The Barrow Neurological Institute, Phoenix, AZ, Nov 19,, 2021
- 5. "The Transorbital approach. The Cornell Experience" 1st International Hands-on Workshop Endoscopic Transorbital Surgery, Barcelona, Spain, Nov 8-9, 2021.
- 6. "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.
- 7. "Endoscopic management of planum and tuberculum meningiomas" Congress of Neurosurgery, Austin, TX, Oct 19, 2021.
- 8. "Endoscopic resection of functional adenomas", Weill Cornell Pituitary Tumor Symposium, Oct 15, 2021.
- 9. "Complex decision-making in pituitary adenoma surgery", Weill Cornell Pituitary Tumor Symposium, Oct 15, 2021.
- 10. "Craniopharyngioma" Annual Southern California Pituitary Symposium at USC, Oct 2, 2021.
- 11. "Endoscopic pituitary surgery" The Master X Annul Live World Course in Brain & Spine Tumor Surgery, August 13, 2021.
- 12. "Expanded endoscopic skull base surgery: Where are we going?" Plenary Lecture, Neurosurgical Society of America, Lake Tahoe June 21, 2021.
- 13. "Transorbital approaches to the cavernous sinus and Meckel's cave", Columbia Endoscopic Surgery Course, June 10, 2021
- 14. "Minimally invasive surgery for anterior skull base meningiomas" International Web-Based Neurosurgery Conference. May 28, 2021.
- 15. "Tubular surgery for brain tumors", Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.
- 16. "Supraorbital eyebrow and transorbital approaches to the skull base" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.

- 17. "Laser interstitial thermotherapy for tumors and epilepsy" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.
- 18. "Endoscopic endonasal skull base approaches" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, May 21, 2021.
- 19. "Laser Interstitial Thermal Therapy for Epilepsy' 10th WFNS Neuroanatomy Committee Webinar, May 19, 2021.
- 20. "The Learning Curve in Endonasal Endoscopic Surgery. Milestones: From a Novice to a Master Surgeon, AANS Front Row Series, April 22, 2021.
- 21. "Pros and Cons of Endonasal Approach to Olfactory Groove Meningiomas", IFNE Virtual Workshop in Neuroendoscopy, April 8, 2021.
- 22. "Advances in Minimally Invasive Skull Base and Tumor Surgery", Medical Student Neurosurgery Seminar Series, Feb. 20, 2021.
- 23. "Lessons learned in minimally invasive skull base surgery" Grand Rounds, USC Department of Neurosurgery, Los Angeles, CA, Jan 29, 2021.
- 24. "Endoscopic resection of pituitary tumors" Advances in Neurosurgery Webinar, Shifa Medical Center, Islamabad, Pakistan, Jan 23, 2021.
- 25. "Cell-specific optical mapping of seizures" Dandy Romanian-German Medical Student Neurosurgical Society Webinar, Dec 4, 2020.
- 26. "Transorbital endoscopic surgery", NASBS Virtual Workshop, Nov. 17, 2020
- 27. "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
- 28. "Use of 5-ALAfor keyhole brain tumor surgery" GleoLearn Webinar, Oct 8, 2020.
- 29. "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.
- 30. "Endonasal skull base surgery. Lessons learned over 20 years" Neurosurgical Atlas Grand Rounds, Sept 14, 2020
- 31. "Endonasal resection of giant pediatric craniopharyngioma", 9th Int'l Masters Course in Brain Tumor Surgery, London, England August 14, 2020
- 32. "Endoscopic approaches to the anterior skull base", 9th Int'l Masters Course in Brain Tumor Surgery, London, England August 15, 2020
- 33. "Anteror skull base meningiomas" University of Miami Cerebrovascular and Skull Base International Symposium, July 30, 2020.
- 34. "Anterior skull base anatomy from the endonasal perepsctve" CNS Virtual Visiting Professor, July 29, 2020.
- 35. "Efficacy and durability of endoscopic endonasal resection of craniopharyngiomas and meningiomas,"11th Singapore Sleep, Allergy & Rhinology Conference, July 17, 2020.
- 36. "Minimally invasive approaches for skull base meningiomas", Virtual Neurosurgery Conference, Fundación Universitaria de Ciencias de la Salud, Bogota, Columbia june 24, 2020.
- 37. "Long-term outcomes after endoscopic craniopharyngioma surgery", Moroccan Society of Neurosurgery, May 30, 2020.

- 38. "Efficacy and durability of endoscopic endonasal resection of craniopharyngiomas and meningiomas," International Web-Based Neurosurgery Congress, Centro por Investigation y Entrenamiento en Neurocirujia, May 21, 2020
- 39. "Long-term outcomes after endoscopic pituitary surgery", Miami Global Brain Tumor Symposium, May 13, 2020.
- 40. "Tubular surgery for brain tumors", Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
- 41. "Supraorbital eyebrow and transorbital approaches to the skull base" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
- 42. "Laser interstitial thermotherapy for tumors and epilepsy" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
- 43. "Endoscopic endonasal skull base approaches" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY, April 24, 2020.
- 44. "Choosing the best approach" Primer Course, North American Skull Base Society Meeting, San Antonio, TX, Feb 7, 2020.
- 45. "Fluorescent imaging in skull base surgery" Hot Topics, North American Skull Base Society Meeting, San Antonio, TX. Feb 8, 2020.
- 46. "3D endoscopy in skull base surgery" Video Sessions, North American Skull Base Society Meeting, San Antonio, TX. Feb 8, 2020.
- 47. "Controversies in Minimally Invasive Skull Base Surgery", Neurology Grand Rounds, Methodist Hospital, Brooklyn, NY Feb 5, 2020.
- 48. "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.
- 49. "Controversies in Minimally Invasive Skull Base Surgery" Grand Rounds, Brigham and Women's Hospital, Boston, MA Jan 22, 2020.
- 50. "Recent advances in pituitary surgery" Endocrinology Grand Rounds, Division of Endocrinology, Weill Cornell Medicine, New York, NY Dec 4, 2019.
- 51. "Re-operation for Pituitary Tumors" Pituitary Tumors: Medical, Surgical and Radiotherapy Treatment Options, Webinar, Pituitary Network Assocation, November 9, 2019.
- 52. "Imaging epilepsy in the brain" Department of Neurology Grand Rounds, Brooklyn Methodist Hospital, New York, NY, October 23, 2019.
- 53. "Operative techniques in pituitary surgery" International Masters in Brain Tumor Surgery Symposium, Congress of Neurosurgery, October 21, 2019.
- 54. "Re-operation for Pituitary Tumors" Pituitary Tumors: Medical, Surgical and Radiotherapy Treatment Options, Weill Cornell Medicine, October 11, 2019.
- 55. "Neuropsychology and epilepsy surgery" Neurosurgery and Beyond, Department of Neurosurgery CME, Weill Cornell Medicine Sept 26, 2019.
- 56. "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.
- 57. "Endoscopic pituitary surgery: how I do it", Eighth Annual World Course in Advanced Brain Tumor Surgery, London July 20, 2019.

- 58. "Surgical anatomy of the sellar region", Eighth Annual World Course in Advanced Brain Tumor Surgery, London July 20, 2019.
- 59. Live Surgical Demonstration, Eighth Annual World Course in Advanced Brain Tumor Surgery, London July 18, 2019.
- 60. "Tubular surgery for brain tumors", Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 7, 2019.
- 61. "Supraorbital eyebrow and transorbital approaches to the skull base" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 7, 2019.
- 62. "Laser interstitial thermotherapy for tumors and epilepsy" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 8, 2019.
- 63. "Endoscopic endonasal skull base approaches" Minimally Invasive Cranial Neurosurgery, Weill Cornell Medicine, New York, NY June 8, 2019.
- 64. "Intracavitary Cesium 131 for resection brain metastases" Brain Metastasis Symposium, Weill Cornell Medicine, New York, NY May 9, 2019.
- 65. "The nose for neurosurgeons"1st Annual Weill Cornell Palm Beach Course on Complex Approaches in Neurosurgery, Palm Beach, FL April 3, 2019.
- 66. "The endonasal suprasellar approach for complex skull base tumors", 1st Annual Weill Cornell Palm Beach Course on Complex Approaches in Neurosurgery, Palm Beach, FL April 3, 2019.
- 67. "Controversies in endoscopic craniopharyngioma surgery. Transcranial or endonasal? Preserve or sacrifice the stalk?" 16th International Pituitary Congress, New Orleans, LA, March 22, 2019.
- 68. "Endoscopic craniopharyngioma surgery. Preserve or sacrifice the stalk?" 3rd Annual Meeting of Korean Society of Endoscopic Neurosurgery, Seoul, South Korea, February 9, 2019.
- 69. "Transcranial versus endonasal surgery for suprasellar meningiomas" 3rd Annual Meeting of Korean Society of Endoscopic Neurosurgery, Seoul, South Korea, February 9, 2019.
- 70. "Minimally Inavasive Approaches to Decompress the Optic Apparatus" Robert M Ellsworth Lecture, Department of Ophthalmology, Weill Cornell Medicine, New York, NY, January 10, 2018.
- 71. "Minimally invasive cranial neurosurgery" Grand Rounds, Department of Neurosurgery, Groote Schuur hospital, Cape Town, South Africa Dec 27, 2018.
- 72. "Endoscopic resection of meningiomas and craniopharyngiomas" Grand Rounds,
 Department of Neurosurgery, St. Barnabas Hospital, Livingston, NJ, November 14, 2018.
- 73. "Pituitary surgery in pregnant women and the elderly" Pituitary Disorders Across the Age Spectrum, Weill Cornell Medicine, October 19. 2018.
- 74. "Endoscopic skull base surgery. Finding but not pushing the edge of the envelope. Plenary Lecture, Congress of Neurosurgery, Houston Texas, October 9, 2018
- 75. "Planum/tuberculum meningioma". Case-Based Discussions, Congress of Neurosurgery, Houston, Texas, October 8, 2018.
- 76. "Endoscopic pituitary surgery: how I do it", Seventh Annual World Course in Advanced Brain Tumor Surgery, London July 14, 2018.
- 77. Live Surgical Demonstration, Seventh Annual World Course in Advanced Brain Tumor Surgery, London July 13, 2018.

- 78. "Endoscopic transplanum approach", Pre-Congress Skull Base Dissection Course, EndoBarcelona, 8th World Congress of Endoscopic Surgery of Paranasal Sinuses, Skull Base, Brain and Spine, Barcelona, Spain, July 4, 2018.
- 79. "Safe corridors for endonasal approaches to the brainstem", EndoBarcelona, 8th World Congress of Endoscopic Surgery of Paranasal Sinuses, Skull Base, Brain and Spine, Barcelona, Spain, July 6, 2018.
- 80. "Endoscopic endonasal surgery for chondrosarcomas", EndoBarcelona, 8th World Congress of Endoscopic Surgery of Paranasal Sinuses, Skull Base, Brain and Spine, Barcelona, Spain, July 7, 2018.
- 81. "To sacrifice or preserve the stalk in endonasal craniopharyngioma surgery" NSA meeting, Jackson Hole, WY, June 11, 2018
- 82. "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.
- 83. "Anatomy of the anterior skull base", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 1-2, 2018.
- 84. "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.
- 85. "Endoscopic transclival transodontoid approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 1-2, 2018.
- 86. "Endoscopic resection of meningiomas: creating and fair comparison" Open versus Endoscopic Approaches to the Anterior Skull Base, AANS New Orleans, May 1, 2018.
- 87. "Anterior skull base approaches" Practical Clinic, AANS New Orleans, April 29, 2018.
- 88. "Endonasal versus transcranial surgery for craniopharyngiomas" XXVIII National Congress of Neurosurgery, Baranquilla, Columbia March 8, 2018.
- 89. "Anterior skull base meningiomas. Algorithm for minimally invasive approaches" XXVIII National Congress of Neurosurgery, Baranquilla, Columbia March 8, 2018.
- 90. "Intracavitary Cesium-131 brachytherapy for brain metastases" XXVIII National Congress of Neurosurgery, Baranquilla, Columbia March 8, 2018.
- 91. "Endoscopic resection of hormone producing pituitary adenomas" Reproductive endocrinology grand rounds, Weill Cornell Medical College, New York, NY Dec. 20, 2017.
- 92. "Endoscopic treatment of pituitary macroadenomas" Pituitary Tumors: Treatment and Diagnostic Dilemmas. Weill Cornell CME, New York, NY Oct 27, 2017.
- 93. "Endoscopic resection of skull base meningiomas" 13th National Congress of the Spanish Skull Base Society, Valencia, Spain Oct 5, 2017.
- 94. "Endoscopic resection of craniopharyngiomas" 13th National Congress of the Spanish Skull Base Society, Valencia, Spain Oct 5, 2017.
- 95. "Endoscopic resection of pituitary adenomas" 13th National Congress of the Spanish Skull Base Society, Valencia, Spain Oct 5, 2017.
- 96. "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.

- 97. "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.
- 98. "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.
- 99. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 19-20, 2017
- 100. "Endoscopic resection of meningiomas and craniopharyngiomas", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 19-20, 2017.
- 101. "Endoscopic transclival and transodontoid approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 19-20, 2017.
- 102. "Endoscopic resection of meningiomas: creating and fair comparison" Open versus Endoscopic Approaches to the Anterior Skull Base, AANS Los Angeles, April 23, 2017.
- 103. "Open versus endoscopic approaches to skull base tumors" Brain Tumor Update Course, AANS Los Angeles, April 22, 2017.
- 104. "Endoscopic Transsphenoidal Approaches", Plenary Lecture, Saudi Arabia Neurosurgical Society, Riyadh, Saudi Arabia, April 9, 2017.
- 105. "Does the chiasmal-pituiary corridor matter in endoscopic endonasal surgery for craniopharyngiomas" NSA Meeting, Ponte Vedra Beach, Florida April 3, 2017.
- 106. "Endoscopic resection of craniopharyngiomas" CNS Webinar, Suprasellar Approaches, March 29, 2017
- 107. "Gasket seal closure of skull base and use of lumbar drains", North American Skull Base Society Meeting, New Orleans, LA, March 4, 2017
- 108. "Minimally invasive skull base surgery" Neuro-oncology Update, Weill Cornell Medical College, New York Presbyterian Hospital, New York, NY March 3, 2017.
- 109. "Endoscopic resection of meningiomas and craniopharyngiomas" Neurosurgery Grand Rounds. St. Barnabas Hospital., New Jersey Feb. 8, 2017.
- 110. Endoscopic approach for craniopharyngiomas" Advanced Endoscopic Skull Base Surgery, Barcelona, Spain, Nov. 10, 2016.
- 111. "Endoscopic approach for acromegaly" Advanced Endoscopic Skull Base Surgery, Barcelona, Spain, Nov. 9, 2016.
- 112. "Endoscopic approaches to the anterior skull base" INOVA Endoscopic Pituitary and Anterior Skull Base Course, Oct. 8, 2016.
- 113. "Endoscopic approaches to the clivus and craniovertebral junction" INOVA Endoscopic Pituitary and Anterior Skull Base Course, Oct. 8, 2016.
- 114. "Endoscopic transpterygoid approach to the cavernous sinus" Endoscopic Skull Base Course, Congress of Neurosurgery, Sept 25, 2016.
- 115. "Closure of the skull base" Pituitary Adenoma Course, Congress of Neurosurgery, Sept 25, 2016.
- 116. "Endoscopic resection of suprasellar and cavernous sinus extension in pituitary adenomas, "Luncheon Seminar, Nonfunctioning Pituitary Adenomas. Congress of Neurosurgery, Sept 26, 2016.

- 117. "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.
- 118. "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.
- 119. "Endoscopic resection of meningiomas and craniopharyngiomas", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2016.
- 120. "Endoscopic transclival and transodontoid approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2016.
- 121. "Extended endonasal endoscopic approaches for invasive and giant pituitary adenomas" "Clival chordomas" EndoChicago, 7th World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 15, 2016.
- 122. "Quality of life after endoscopic resection off craniopharyngiomas", EndoChicago, 7th World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 16, 2016.
- 123. "Endoscopic surgery in the cavernous sinus", EndoChicago, 7th World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 18, 2016.
- 124. "Lumbar drains in endonasal skull base surgery", EndoChicago, 7th World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 18, 2016.
- 125. "Managing arterial injury in endoscopic skull base surgery", EndoChicago, 7th World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, May 18, 2016.
- 126. Endoscopic resection of meningiomas: creating and fair comparison" Open versus Endoscopic Approaches to the Anterior Skull Base, AANS Chicago, May 2, 2016.
- 127. "Extended endonasal endoscopic approaches for invasive and giant pituitary adenomas" Practical and Technical Aspects of Transsphenoidal Surgery, AANS Chicago, April 30, 2016
- 128. "Open versus endoscopic approaches to skull base tumors" Brain Tumor Update Course, AANS Chicago, April 30, 2016.
- 129. "Endoscopic transplanum approach to craniopharyngiomas and meningiomas", 2nd Annual International Congress of Neurosurgery, Ain Shams University, Cairo, Egypt, April 7, 2016.
- 130. "Endoscopic approaches to the clivus, cavernous sinus and Meckels cave", 2nd Annual International Congress of Neurosurgery, Ain Shams University, Cairo, Egypt, April 7, 2016.
- 131. "Endoscopic skull base surgery: Lessons learned" 2016 Winter Clinics for Cranial and Spinal Surgery. Snowmass, CO, Feb 24, 2016.
- 132. "Minimally Invasive Brain Surgery" Grand Rounds, Department of Rehabilitation Medicine, Weill Cornell Medical College, Nov 19, 2015.
- 133. "Endoscopic Skull Base Approaches", 4th Annual Barrow Neuro-Oncology Symposium, Phoenix, Arizona, Nov 6, 2015
- 134. "Cesium 131 brachytherapy for intracranial metastases", 4th Annual Barrow Neuro-Oncology Symposium, Phoenix, Arizona, Nov 7, 2015

- 135. "Endoscopic transsphenoidal pituitary surgery" 4th Annual Symposium on Endoscopic transsphenoidal surgery" Kocaeli University, Kocaeli, Turkey, Oct 20, 2015.
- 136. "Endoscopic extended transsphenoidal approaches" 4th Annual Symposium on Endoscopic Transsphenoidal Surgery" Kocaeli University, Kocaeli, Turkey, Oct 20, 2015.
- 137. "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.
- 138. "Surgery for non-hormone producing pituitary adenomas" Practical Course: Keyhole and Endoscopic Cranial Surgery, Congress of Neurosurgeons, New Orleans, LA, Sept 27, 2015.
- 139. "Endonasal versus Transcranial Approaches: Pros and Cons" Practical Course: Keyhole and Endoscopic Cranial Surgery, Congress of Neurosurgeons, New Orleans, LA, Sept 27, 2015.
- 140. "Endoscopic approaches to the anterior skull base" Practical Course: Brain Tumor Update, Congress of Neurosurgeons, New Orleans, LA, Sept 26, 2015.
- 141. "Endoscopic approach to skull base chordomas" Neuro-Oncology Session, XXIII Mexican Neurosurgical Congress, Mazatlan, Mexico, August 3, 2015.
- 142. "Endoscopic surgery of the skull base: limitations", Breakfast seminar, XXIII Mexican Neurosurgical Congress, Mazatlan, Mexico, August 4, 2015.
- 143. "Extended transsphenoidal approach for suprasellar tumors" Plenary Lecture, XXIII Mexican Neurosurgical Congress, Mazatlan, Mexico, August 4, 2015.
- 144. "Imaging and reimagining the epileptic focus" Initiative of the Brain Committee Meeting, Weill Cornell Medical College, New York, NY, May 26, 2015
- 145. "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
- 146. "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.
- 147. "Endoscopic resection of meningiomas and craniopharyngiomas", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 8-9, 2015.
- 148. "Endoscopic transclival and transodontoid approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 8-9, 2015.
- 149. "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.
- 150. "Endoscopic resection of craniopharyngiomas" Open versus Endoscopic Approaches to the Anterior Skull Base, AANS Washington, DC, May 3, 2015.
- 151. "Intra-cavitary brachytherapy versus stereotactic radiosurgery for resected brain metastases", Neurosurgical Society of America, Newport Coast, CA, April 13, 2015.
- 152. "Mid-career training in neuro-endoscopy" Neurosurgical Society of America, Newport Coast, CA, April 13, 2015.

- 153. "Endoscopic endonasal resection of chordomas and chondrosarcomas" Radiation Oncology Grand Rounds, Weill Cornell Medical College, New York, NY, January 15, 2015.
- 154. "Endoscopic endonasal resection of chordomas and chondrosarcomas" Skull Base and Intraventricular Neuro-Endoscopy, Emory University School of Medicine, Atlanta Georgia, Dec 11, 2014.
- 155. "Endoscopic endonasal resection of anterior skull base meningiomas" Skull Base and Intraventricular Neuro-Endoscopy, Emory University School of Medicine, Atlanta Georgia, Dec 11, 2014.
- 156. "Optical mapping of seizure onset and propagation" 28th Epilepsy Society of Australia Meeting, Melbourne, Australia Nov 7, 2014.
- 157. "Novel brain stimulation strategies for epilepsy", 28th Epilepsy Society of Australia Meeting, Melbourne, Australia Nov 7, 2014.
- 158. "Endoscopic approaches to the anterior skull base" Practical Course: Brain Tumor Update, Congress of Neurosurgeons, Boston, MA October 18, 2014.
- 159. "Quality of life following endonasal endoscopic craniopharyngioma surgery" European Society of Neurosurgical Societies, Prague, Czech Republic, October 14, 2014.
- 160. "Endoscopic skull base surgery. Lessons Learned" European Society of Neurosurgical Societies, Prague, Czech Republic, October 13, 2014.
- 161. "Endoscopic skull base surgery. Lessons learned" Grand Rounds, Columbia-Presbyterian Department of Neurosurgery Oct 9, 2014.
- 162. "Endoscopic endonasal surgery for Cushing's Disease" Update on the Management of Pituitary Tumors. Washington University in St. Louis, Sept. 27, 2014.
- 163. "For George...." George Ojemann Symposium, University of Washington, Seattle, September 26, 2014.
- 164. "Quality of life after endonasal endoscopic resection of craniopharyngiomas" American Academy of Neurological Surgeons, Santa Rosa Beach, Florida, September 18, 2014.
- 165. "Endoscopic endonasal approach to the clivus and petrous apex" UCSF Neurosurgery Update 2014, Silverado, Napa CA. August 9, 2014.
- 166. "Endoscopic endonasal approach to the suprasellar cistern" UCSF Neurosurgery Update 2014, Silverado, Napa CA. August 8, 2014.
- 167. "Resection cavity volume following cesium-131 intracavitary brachytherapy for brain metastases" Neurosurgical Society of America, New Brunswick, Canada, June 9, 2014.
- 168. "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.
- 169. "Endoscopic resection of meningiomas and craniopharyngiomas", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, May 30-31, 2014.
- 170. "Endoscopic transclival and transodontoid approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, May 30-31, 2014.
- 171. "Cesium-131 brachytherapy for brain metastases", Hematology/Oncology Grand Rounds, Weill Cornell Medical College, May 28, 2014

- 172. "Endoscopic approaches to the clivus", Duke/Methodist Cerebrovascular and Skull Base Conference, The Battle at Pinehurst, May 16, 2014
- 173. "Closure of skull base defects" 6th World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
- 174. "Complications of endoscopic endonasal skull base surgery" 6th World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
- 175. "Anterior skull base anatomic dissection" 6th World Congress for Endoscopic Surgery off the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
- 176. "Endoscopic management of chondrosarcomas" 6th World Congress for Endoscopic Surgery off the Brain, Skull Base & Spine, Milan, Italy, Feb. 17, 2014.
- 177. "Long-term outcome for craniopharyngiomas surgery" 6th World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 16, 2014.
- 178. "Endoscopic management of malignant skull base tumors" 6th World Congress for Endoscopic Surgery of the Brain, Skull Base & Spine, Milan, Italy, Feb. 15, 2014.
- 179. "Extended transsphenoidal approach results" Practical and technical aspects of transsphenoidal surgery, Practical Course, AANS, San Francisco, April 6, 2014.
- 180. "Endoscopic surgical corridors to the skull base" II Symposio de Oncologia y Base del Cranio, Cartegena, Columbia, March 20, 2014.
- 181. "Algorithm for endoscopic skull base reconstruction" II Symposio de Oncologia y Base del Cranio, Cartegena, Columbia, March 20, 2014.
- 182. "Treatment of chordomas with endoscopy" II Symposio de Oncologia y Base del Cranio, Cartegena, Columbia, March 20, 2014.
- 183. "Treatment of craniopharyngiomas with endoscopy" II Symposio de Oncologia y Base del Cranio, Cartegena, Columbia, March 20, 2014.
- 184. "Cushings disease" II Symposio de Oncologia y Base del Cranio, Cartegena, Columbia, March 20, 2014.
- 185. "Endoscopic endonasal sellar and parasellar surgery" Endocrinology grand rounds, University of Maryland, March 10, 2014.
- 186. "Transcranial and endoscopic microsurgical operative corridors: accessing difficult-to-reach tumors. AANS Operative Grand Rounds, Fen 25, 2014.
- 187. "The endonasal approach to the odontoid and its impact on early extubation and feeding", North American Skull Base Society, San Diego, Feb 14, 2014.
- 188. "Quality of life after endonasal craniopharyngioma surgery" North American Skull Base Society, San Diego, Feb 14, 2014.
- 189. "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.
- 190. "Endoscopic approach for meningiomas and craniopharyngiomas" Skull Base and Intraventricular Neuro-Endoscopy Course, Emory University School of Medicine, Atlanta, GA, Dec 5, 2013.
- 191. "Endoscopic approach for chordomas", Skull Base and Intraventricular Neuro-Endoscopy Course, Emory University School of Medicine, Atlanta, GA, Dec 5, 2013.
- 192. "Endoscopic approaches to the clivus" Endoscopic and Microscopic Approaches to the Clivus, Methodist Hospital, Houston, TX, Nov 23, 2013.

- 193. "Endoscopic pituitary surgery. What is the advantage?" The Pituitary Gland in health and Disease, Weill Cornell Medical College, New York, NY Nov 8, 2013.
- 194. "When is an endoscopic approach necessary?" Luncheon Seminar, Congress of Neurosurgery, San Francisco, CA, October 22, 2013.
- 195. "Open versus endoscopic approaches to the skull base" Plenary Lecture, Congress of Neurosurgery, San Francisco, CA, October 21, 2013.
- 196. "Endoscopic skull base surgery. The road less travelled", Grand Rounds, Department of Otolaryngology, Weill Cornell Medical College, New York Presbyterian Hospital, October 17, 2013.
- 197. "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.
- 198. "Endoscopic resection of tuberculum sella meningiomas". The 1st Dandy Division of Skull Base Surgery Meeting, St. Louis, MO, Oct 4th, 2013.
- 199. "Probing the epileptic network with calcium dyes and multi-contact electrode arrays" American Academy of Neurological Surgery, Newport Beach, CA, Sept 26, 2013.
- 200. "Endoscopic skull base surgery. Lessons learned", Plenary Lecture, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 18, 2013.
- 201. 'Surgery for benign brain tumors in eloquent cortex. Management strategies', Plenary Lecture, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 18, 2013.
- 202. "Removal of giant pituitary adenomas" Breakfast seminar, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 17, 2013.
- 203. "Endoscopic transplanum approach to the suprasellar cistern", Breakfast seminar, Mexican Neurosurgical Congress, Ixtapa, Mexico, July 16, 2013.
- 204. "Neurovascular coupling in epileptogenesis: a zone or a network", Plenary Lecture, International league Against Epilepsy Meeting, Montreal, Canada, June 27, 2013
- 205. "Endoscopic resection of giant adenomas," Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 14-15, 2013
- 206. "Endoscopic resection of meningiomas and craniopharyngiomas" Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 14-15, 2013
- 207. "Endoscopic transclival and transodontoid approach" Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 14-15, 2013
- 208. "Optical imaging for epilepsy surgery", Stereotactic and Functional Neurosurgery Section, New Orleans, LA, April 31, 2013.
- 209. "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.
- 210. "Endoscopic approach to juxtasellar and parasellar tumors", Breakfast Seminar, AANS, New Orleans, LA, April 30, 2013.
- 211. "Endoscopic surgery for sellar and parasellar tumors" AANS Practical Workshop, Brain Neoplasms Update, New Orleans, LA, April 28, 2013.
- 212. "Endoscopic transsphenoidal surgery for giant adenomas" AANS Practical Workshop, Transsphenoidal Surgery New Orleans, LA, April 28, 2013.

- 213. "The endonasal approach to giant pituitary adenomas", Rhinology IV, Sao Paolo, Brazil April 18, 2013
- 214. "The endonasal extended suprasellar approach", Rhinology IV, Sao Paolo, Brazil April 18, 2013
- 215. "The evolution and future of endonasal endoscopic skull base and brain surgery" Plenary lecture, Rhinology IV, Sao Paolo, Brazil April 18, 2013
- 216. "Endoscopic endonasal transtuberculum, transplanum approach: Lessons learned in a large series of patients", Neurosurgical Society of America, Sea Island Georgia, April 8, 2013.
- 217. "Endoscopic skull base anatomy and approaches", Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
- 218. "Endoscopic pituitary surgery", Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
- 219. "Endoscopic approaches for meningiomas and craniopharyngiomas", Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
- 220. "Endoscopic transpterygoidal approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
- 221. "Endoscopic transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
- 222. "Endoscopic transclival and transodontoid approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Singapore, March 12-13, 2013
- 223. "Endoscopic skull base surgery: indication and results" Grand Rounds, Department of Neurosurgery, Lenox-Hill Hospital, New York, NY March 5, 2013
- 224. "Meningiomas. The best quality care is by the endoscopic endonasal approach" North American Skull Base Society Meeting, Miami, Florida, Feb 16, 2013
- 225. "Endoscopic approaches to sellar and suprasellar tumors" Breakfast seminar, North American Skull Base Society Meeting, Miami, Florida, Feb 16, 2013
- 226. "Endoscopic endonasal approaches to craniopharyngiomas" North American Skull Base Society Meeting, Miami, Florida, Feb 15, 2013
- 227. "Surgical corridors. Sellar and suprasellar approaches" Pre-meeting practical course, North American Skull Base Society Meeting, Miami, Florida, Feb 13, 2013
- 228. "Endonasal surgical anatomy" Pre-meeting practical course, North American Skull Base Society Meeting, Miami, Florida, Feb 13, 2013
- 229. "Cesium-131 brachytherapy for resected brain metastases" Luncheon Seminar, Society for Neuro-Oncology, Washington, DC, November 17, 2012.
- 230. "Endoscopic skull base and pituitary surgery" New York Advanced Rhinology and Sinus Surgery 2012. New York, November 10, 2012
- 231. "Phase I/II trial of post-resection intracavitary brachytherapy for brain metastases" American Academy of Neurosurgery, Cape Cod, MA, October 18, 2012.
- 232. "Endonasal resection of the odontoid" Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 13, 2012
- 233. "The transcribriform approach" Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012

- 234. "Endoscopic resection of meningiomas and craniopharyngiomas" Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012
- 235. "Endoscopic pituitary surgery" Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012
- 236. "Anatomy and approaches" Endoscopic Skull Base and Pituitary Surgery, CME Course, Palm Beach, Florida October 12, 2012
- 237. "Advantages of endoscopic skull base approaches" Open Skull Base Surgery, When is the Traditional Approach Necessary, Luncheon Seminar, Congress of Neurosurgery, October 10, 2012.
- 238. "Endoscopic resection of chordomas and chondrosarcomas" Luncheon Seminar, Skull Base Endoscopy. Utility and limitations. Congress of Neurosurgery, Chicago, October 9, 2012.
- 239. "Endoscopic resection of meningiomas" Practical Course. Masters of Neuroendoscopy. Congress of Neurosurgery, Chicago, Oct 5, 2012.
- 240. "Epilepsy: Disease process, and new frontiers" BME 411, Cornell University, Ithaca, NY Oct 2, 20012
- 241. "Endoscopic skull base surgery" 11th Annual International Neuro-Oncology Updates, Baltimore, MD, Sept 21, 2012.
- 242. "Intraoperative CSF leak during pituitary surgery, risk factors and significance" International Society for Pituitary Surgeons, Montreal, Canada, June 23, 2012.
- 243. "Endoscopic approaches to the anterior skull base" Department of Otolaryngology-Head and Neck Surgery, Montefiore Medical Center, Bronx, NY, June 18, 2012
- 244. "Endoscopic skull base approaches" University of Neurosurgery Webinar, May22, 2012.
- 245. "Epilepsy Surgery" Brain and Spine CME Course, Weill Cornell Medical College, New York, NY, May 4, 2012.
- 246. "Endoscopic skull base surgery" Honored Guest Lecturer, Society for British Neurosurgery, Aberdeen, Scotland, April 18, 2012.
- 247. "Complications in endoscopic skull base surgery", AANS Breakfast Seminar, Miami, Florida, April 16, 2012.
- 248. "Endoscopic transsphenoidal surgery for giant adenomas" AANS Practical Workshop, Miami, Florida, April 15, 2012.
- 249. "Endoscopic craniopharyngioma surgery" 5th World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Vienna, Austria, April 1, 2012.
- 250. "The importance and timing of optic canal decompression in endonasal endoscopic resection of tuberculum sella and planum sphenoidale meningiomas." 5th World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine, Vienna, Austria, March 30, 2012.
- 251. "Endoscopic skull base surgery" Grand Rounds, Department of Neurosurgery, Yale-New Haven Medical Center, New Haven, CT, March 28, 2012.
- 252. "Endoscopic endonasal resection of suprasellar meningiomas and craniopharyngiomas" Honored Guest, 1st International Forum on Skull Base Trauma and Minimally Invasive Neurosurgery and 1st Workshop on Endoscopic Skull base Surgery and 12th Workshop on latest Neurosurgical Advancements, Neurosurgical Department of Changzheng Hospital, Shanghai, China March 17-18, 2012

- 253. "Endoscopic enodnasal transpterygoid and transclival approach" Honored Guest, 1st International Forum on Skull base Trauma and Minimally Invasive Neurosurgery and 1st Workshop on Endoscopic Skull base Surgery and 12th Workshop on latest Neurosurgical Advancements, Neurosurgical Department of Changzheng Hospital, Shanghai, China March 17-18, 2012
- 254. "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.
- 255. "Endoscopic Skull Base Surgery" Grand Rounds, Department of Neurosurgery, North Shore-LIJ, Long Island, NY, March 6, 2012.
- 256. "3D Extended Endoscopic Skull Base Approaches" 3D Endoscopy Course, Montefiore Institute for Minimally Invasive Surgery, Montefiore Medical Center, Bronx, NY, March 2, 2012.
- 257. "Advantages of 3D Endoscopy" 3D Endoscopy Course, Montefiore Institute for Minimally Invasive Surgery, Montefiore Medical Center, Bronx, NY, March 2, 2012.
- 258. "Endoscopic sellar and suprasellar approaches" North American Skull Base Society, Dissection Course, Las Vegas, NV, Feb 15, 2012.
- 259. "Endoscopic Skull Base Surgery" 10th Annual Masters Course in Skull Base Surgery, University of South Florida, Tampa, FL, Feb 9, 2012.
- 260. "Incidence and significance of intraoperative CSF leak in endoscopic pituitary surgery using intrathecal fluorescein" 38th Richard Lende Neurosurgery Conference January 28, 2012.
- 261. "Neurosurgery Choosing a Life in Medicine and Science" Kingswood-Oxford Stroud Science Symposium, West Hartford, CT, January 20, 2012.
- 262. "Endoscopic endonasal transpterygoid and transclival approaches", Johns Hopkins 5th Annual Skull Base Course, Baltimore, MD, Dec 9, 2011.
- 263. "Seizure Control in Glioma Surgery", Brain Tumor and Epilepsy SIG, American Epilepsy Society Meeting, Baltimore, MD, Dec 4, 2011.
- 264. "Endoscopic pituitary surgery" Geisinger 1st Annual Skull Base and Neuro-Oncologu Surgery Symposium, Philadelphia, PA, Dec 1, 2011.
- 265. "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
- 266. "Endoscopic skull base surgery" Neurosurgery Grand Rounds, St. Barnabas Hospital, West Orange, New Jersey, Nov. 9, 2011.
- 267. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
- 268. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
- 269. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
- 270. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Oct 21-22, 2011.
- 271. "Improved quality of life 6 months after endoscopic skull base surgery" Academy of Neurological Surgeons, Phoenix, AZ, Oct 20, 2011.

- 272. "Endoscopic Resection of Meningiomas" Practical Course. Master of Neuroendoscopy. Congress of Neurosurgery, Washington DC, Oct 1, 2011.
- 273. "Epilepsy: Disease process, and new frontiers" BME 411, Cornell University, Ithaca, NY Sept 24, 20011
- 274. "Preictal vascular phenomenon" 5th International Seizure Prediction Workshop, Dresden, Germany, Sept 21-23, 2011.
- 275. "Endoscopic skull base surgery" CNS 3D surgical Anatomy Course, Burr Ridge, IL, August 27, 2011.
- 276. "Tecnicas de reconstruction en cirugia de la base de craneo", 21st Mexican Neurosurgical Congress, Acapulco, July16-21, 2011. "Minimally invasive neurosurgery", Video Lunch Con Los Expertos, 21st Mexican Neurosurgical Congress, Acapulco, July16-21, 2011.
- 277. "Aboradaje de tumors de la base del craneo por endoscopia", 21st Mexican Neurosurgical Congress, Acapulco, July16-21, 2011.
- 278. "Aboradaje endoscopico a los tumors de hipofisis ¿Como lo hago?", 21st Mexican Neurosurgical Congress, Acapulco, July16-21, 2011.
- 279. "Meningiomas del tuberculo selar. Indicacion para abordaje endoscopico extendido", 21st Mexican Neurosurgical Congress, Acapulco, July16-21, 2011.
- 280. "Endoscopic skull base and pituitary Surgery", Grand Rounds, Department of Neurosurgery, University of Michigan, Ann Arbor, MI, June 29, 2011.
- 281. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
- 282. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
- 283. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
- 284. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2011.
- 285. "Neurovascular coupling mechanisms in rats and humans" Visiting Professor,
 Department of Neurobiology, Barrow Neurological Institute, Phoenix, AZ May 17, 2011.
- 286. "Endoscopic approach to juxtasellar and parasellar tumors", Breakfast Seminar, AANS, Denver, CO, April 13, 2011.
- "3D Endoscopic Skull Base Surgery" Visionsense Educational Breakfast, AANS Meeting, Denver, CO, April 12, 2011
- 288. "Pre-ictal and ictal neurometabolic and vascular coupling" Neurosurgical Society of America, Kona, Hawaii, March 28, 2011.
- 289. "Endoscopic Skull Base Surgery" Grand Rounds, Mt. Sinai Department of Neurosurgery, New York, NY, March 23, 2011.
- 290. "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.
- 291. "3D Endoscopy" Penn Rhinology and Skull Base Course, University of Pennsylvania, Philadelphia, PA, March 10, 2011.

- 292. "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.
- 293. "Craniopharyngioma Endoscopic approaches" North American Skull Base Society, Special Seminar, Scottsdale, AZ, Feb 15, 2011.
- 294. "Endoscopic sellar and suprasellar approaches" North American Skull Base Society, Dissection Course, Scottsdale, AZ, Feb 15, 2011.
- 295. "Neurovascular coupling in epilepsy in rats and humans" Bombay Neurological Association, Mumbai, India, Feb 2, 2011.
- 296. "Skull base and pituitary anatomy", Nasal, Paranasal Sinusus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
- 297. "Endoscopic resection of pituitary tumors", Nasal, Paranasal Sinusus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
- 298. "Endoscopic transplanum, transtuberculum approach", Nasal, Paranasal Sinusus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
- 299. "3D endoscopic skull base surgery", Nasal, Paranasal Sinusus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
- 300. "Endoscopic transethmoidal, transcribriform approach", Nasal, Paranasal Sinusus and Anterior Skull base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
- 301. "Endoscopic transclival, transodontoid approach", Nasal, Paranasal Sinusus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
- 302. "Complications of endoscopic skull base surgery", Nasal, Paranasal Sinusus and Anterior Skull Base Surgery Workshop, Dr. Balabhi Nanavati Hospital, Mumbai, India, Feb 3, 2011.
- 303. "Neurovascular coupling in epilepsy in rats and humans" Neurology Grand Rounds, Weill Cornell Medical College, New York, NY, Dec 8, 2010.
- 304. "Endoscopic approach to the anterior cranial fossa" Johns Hopkins 4th Annual Skull Base Course, Baltimore, MD, Dec 3, 2010.
- 305. "Endoscopic approach to the pterygopalatine fossa" Johns Hopkins 4th Annual Skull Base Course, Baltimore, MD, Dec 3, 2010.
- 306. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Nov 6, 2010.
- 307. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Nov 5, 2010.
- 308. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Anspach Facility, West Palm Beach, FL, Nov 5, 2010.
- 309. "Neurovascular coupling in epilepsy in rats and humans" Neurology Grand Rounds, University of Rochester, Rochester, NY, Oct 29, 2010.
- 310. "Endoscopic endonasal transpterygoidal approach" Endoscopic Skull Base Surgery Luncheon Seminar, CNS, San Francisco, CA, Oct 18, 2010.

- 311. "Endoscopic resection of chordomas and juvenile angiofibromas" Intracranial Endoscopy Practical Course, CNS, San Francisco, CA, Oct 17, 2010.
- 312. "Volumetric measurement predicts extent of resection and complications in giant pituitary adenomas" International Society of Pituitary Surgeons. Sonoma, CA, Oct 15, 2010.
- 313. "Epilepsy, pathophysiology, surgical management and new frontiers" BME 411, Cornell University, Ithaca, NY, Oct 6, 2010.
- 314. "Optical imaging of preictal haemodynamic changes" Preictal Phenomenoa. Expert Workshop. Epilepsy Research UK. St. Catherine's College, Oxford, UK Sept 23-24, 2010
- 315. "Neurovascular coupling in rats and humans," Grand Rounds, Departments of Neurosurgery and Neurology, MGH, Boston, MA Sept 16, 2010.
- 316. "Endoscopic approach to the suprasellar cistern and anterior fossa", Endoscopic Skull Base and Intraventricular Surgery, CME Course, Emory University, Atlanta, GA, July 31, 2010.
- 317. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2011.
- 318. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2010.
- 319. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2010.
- 320. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 11-12, 2010.
- 321. Endoscopic skull base surgery. A neurosurgeon's perspective" Endoscopic Sinus Surgery, CME Course, Weill Cornell Medical College, New York, NY June 3, 2010.
- 322. "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.
- 323. "Diagnosis and management of brain tumors, Brain and Spine 2010 CME Course, Weill Cornell Medical College, New York, NY, May 7, 2010.
- 324. "Endoscopic resection of craniopharyngiomas" Breakfast Seminar. AANS, Philadelphia, PA, May 3, 2010.
- 325. "Endoscopic approaches to the skull base" Practical Course. AANS, Philadelphia, PA, May1, 2010.
- 326. "3D endoscopy: flattening the learning curve" Plenary Session. 4th World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine. Pittsburgh, PA, April 28, 2010.
- 327. "Endoscopic resection of craniopharyngiomas. Is craniotomy obsolete?" Miniseminar. 4th World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine. Pittsburgh, PA, April 27, 2010.
- 328. "Endoscopic approaches to the anterior skull base" Luncheon Seminar. 4th World Congress for Endoscopic Surgery of the Brain, Skull Base and Spine. Pittsburgh, PA, April 27, 2010.
- 329. "Endooscopic skull base surgery: pros and cons" Symposium, NSA, Pebble Beach, CA, April 14, 2010.

- 330. "Optical imaging of epilepsy ready for prime time?" Investigator's Workshop, AES, Boston, MA Dec 6, 2009.
- 331. "Optical imaging of neurovascular coupling in epilepsy" Engineering and Epilepsy SIG, AES, Boston, MA, Dec 5, 2009.
- 332. "Endoscopic skull base surgery" Neurology Grand Rounds, Weill Cornell Medical College, New York, NY, Nov 29, 2009
- 333. "Epilepsy, pathophysiology, surgical management and new frontiers" BME 411, Cornell University, Ithaca, NY, Nov. 10, 2009.
- 334. "Epilepsy Surgery" Columbia Epilepsy Center Patient Day, New York, NY, Nov 7, 2009
- 335. "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.
- 336. "Advantages of endoscopy in pituitary surgery" Lunch Seminar, CNS, New Orleans, LA, Oct 27, 2009.
- 337. "Endoscopic management of benign skull base tumors" Sunrise session, Society for Neuro-Oncology, New Orleans, LA, Oct 23, 2009.
- 338. "Endoscopic skull base surgery", Neurosurgery Grand Rounds, Weill Cornell Medical College, New York, NY. Oct 19, 2009.
- 339. "Endoscopic surgery for chordomas" in The Multidisciplinary management of Skull Base Chordomas and Chondrosarcomas, NASBS, New Orleans, LA, Oct. 18, 2009.
- 340. "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.
- 341. "Endoscopic Approach to the Suprasellar Cistern?" in Endoscopic Endonasal Skull Base Dissection Course, NASBS, New Orleans, LA, Oct. 14, 2009.
- 342. "Epilepsy: Disease process, and new frontiers" BME 411, Cornell University, Ithaca, NY Sept 24, 2009
- 343. "Endoscopic pituitary and parasellar surgery: advantages of the minimally invasive endonasal approach" Endocrinology Grand Rounds, Weill Cornell Medical College, New York, Sept 23, 2009
- 344. "The role of skull base endoscopy: replaces, complements or antagonizes traditional skull base surgery. A round table" WFNS, Boston, MA, Sept. 1, 2009.
- 345. "Endoscopic endonasal resection of clival chordomas" NSA meeting, Hot Springs, VA, June 8, 2009.
- 346. "Endoscopic approach to the suprasellar cistern and anterior fossa", Endoscopic Skull Base and Intraventricular Surgery, CME Course, Emory University, Atlanta, GA, July 31, 2010.
- 347. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.
- 348. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.
- 349. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.

- 350. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 5-6, 2009.
- 351. "Brain Tumors: What You Need To Know" Weill Cornell Executive Council, Weill Cornell Medical College, New York, June 3, 2009
- 352. "Surgical treatment of brain tumors" Brain and Spine in 2009, CME Course, Weill Cornell Medical College, New York, May 15, 2009
- 353. "Epilepsy surgery an update" Brain and Spine in 2009, CME Course, Weill Cornell Medical College, New York, May 15, 2009
- 354. "Endoscopic skull base approaches" Intracranial endoscopy, techniques, outcomes and complications: practical course, AANS, San Diego, May 3, 2009.
- 355. "Endoscopic approaches to the anterior skull base" Breakfast Seminar, Open versus Endoscopic Approaches. AANS, San Diego, May 5, 2009.
- 356. "Endoscopic approaches to juxtasellar and parasellar tumors", Breakfast seminar, AANS, San Diego, May 4, 2009.
- 357. "Minimally Invasive Brain Surgery" Lecture to board of Trustees, NYPH, Weill Cornell Medical College, April 22, 2009.
- 358. "Endoscopic suprasellar approaches for skull base lesions" Mini Seminar Endoscopic Surgery of the Skull Base, Rhinology 2009, Philadelphia, PA, April 19, 2009.
- 359. "Endoscopic resection of clival chordomas" Lende Meeting, Salt Lake City, Utah, Feb 1, 2009.
- 360. "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.
- 361. "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.
- 362. "Imaging the onset and spread of neocortical epilepsy", New Frontiers in Neurological Surgery, Weill Cornell Medical College, Dec. 5, 2008.
- 363. "Expanded endonasal skull base surgery" Nassau Nerosurgical Society, Long Island Marriott, Dec 2, 2008.
- 364. "Cell phones and brain tumors: session moderator" Patient Awareness Day, The Brain Tumor Foundation, NYU Medical School, Nov 16, 2008.
- 365. "Endoscopic endonasal skull base surgery A neurosurgeon's perspective" Advanced Endoscopic Sinus Surgery, Weill Cornell Medical College, New York, NY Nov 14, 2008.
- 366. "Building a community of collaborators: moving your research to the next level", Congress of Neurosurgery, Orlando, FL, Sept 20, 2008.
- 367. "Epilepsy: Disease process, and new frontiers" BME 411, Cornell University, Ithaca, NY Sept 26, 2008
- 368. "Endoscopic skull base approaches" North American Skull Base Society Practical Course, Vancouver, Canada, Sept 9, 2008.
- 369. "Endoscopic approach to the suprasellar cistern and anterior fossa", Endoscopic Skull Base and Intraventricular Surgery, CME Course, Emory University, Atlanta, GA, July 31, 2010.

- 370. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
- 371. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
- 372. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
- 373. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 6-7, 2008.
- 374. "Endoscopic skull base surgery approaches" Neurosurgical Society of America, Whistler, British Columbia, Canada June 4, 2008.
- 375. "How to manage complications of transnasal skull base surgery" Neuroendoscopy 2008, Sao Paolo, Brazil, May 22-24, 2008.
- 376. "Transnasal endoscopic approach to the odontoid. Early experience" Neuroendoscopy 2008, Sao Paolo, Brazil, May 22-24, 2008.
- 377. "Transanasal resection of skull base meningiomas" Neuroendoscopy 2008, Sao Paolo, Brazil, May 22-24, 2008.
- 378. "Transnasal approaches to the skull base and brain: Anterior skull base transplanum and transtuberculum" Neuroendoscopy 2008, Sao Paolo, Brazil, May 22-24, 2008.
- 379. "Endoscopic skull base surgery" Grand Rounds, Baylor College of Medicine, Houston, TX, May 9, 2008.
- 380. "Minimally invasive intracranial neurosurgery" Houston Neurological Society, 19th Annual George Ehni Lectureship Houston, TX, May 9, 2008.
- 381. "Endoscopic skull base approaches" Intracranial endoscopy, techniques, outcomes and complications: practical course, AANS, Chicago, April 26, 2008
- 382. Endoscopic approaches to juxtasellar and parasellar tumors", Breakfast seminar, AANS, Chicago, April 26, 2008
- 383. "3D stereondoscopic pituitary surgery", Joint Section of Tumors Section Meeting, AANS, Chicago, April 26, 2008
- 384. "Refining brain surgery: laser transections to control epilepsy" The 90th Annual Cornell Silicon Valley Presidential Event, Palo Alto, CA April 8, 2008
- 385. "Neurovascular coupling in epilepsy", Visiting Professor, Resident Teaching Conference, Department of Neurosurgery, UCLA, LA, CA, March 21, 2008.
- 386. "Endoscopic skull base and pituitary surgery" Visiting Professor, Grand Rounds, Department of Neurosurgery, UCLA, LA, CA, March 21, 2008
- 387. "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.
- 388. "Endoscopic skull base surgery" Advanced Endoscopic Sinus Surgery, Weill Cornell Medical College, New York, NY Feb 15-16, 2008.
- 389. "Two-photon laser transections for neocortical epilepsy" University Council Administrative Board Meeting, Cornell Club, New York, NY February 7, 2008.
- 390. "Neurovascular coupling during epileptiform events in rats and humans" Richard Lende Neurosurgery Conference, Salt Lake City, Utah, February 2, 2008.

- 391. "Epilepsy Surgery" in Epilepsy Update, Weill Cornell Medical College, New York, NY October 27, 2007.
- 392. "Epilepsy: Disease process, and new frontiers" BME 411, Cornell University, Ithaca, NY Sept 24, 2007
- 393. "Optical Imaging" in Advances in Epilepsy Surgery Symposium, Congress of Neurosurgery, San Diego, CA, Sept. 19, 2007
- 394. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
- 395. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
- 396. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
- 397. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, September 7-8, 2007.
- 398. "Minimally Invasive Neurosurgery" Brain Tumors: Confronting the Challenge Together. Weill Cornell Medical College, New York, NY, June 16, 2007.
- 399. "Endoscopic Skull Base Surgery: Classification of operative approaches and outcomes", NSA Meeting, Kohler, WI, June 5, 2007.
- 400. "Endoscopic Skull Base Approaches", NASBS, Chicago May 24-27, 2007.
- 401. "Endoscopic endonasal transethmoidal transcribiform transfovea ethmoidalis approach to the anterior skull base and anterior cranial fossa". NASBS, Chicago May 24-27, 2007.
- 402. "The "gasket-seal" watertight closure in endoscopic endonasal skull base surgery". NASBS, Chicago May 24-27, 2007.
- 403. "Endoscopic, transethmoidal, transcribriform, transfovea ethmoidalis approach to the anterior fossa", Neuroendoscopy 2007, Versaille, Paris, May 9, 2007.
- 404. "The "gasket-seal" closure of the anterior skull base", Neuroendoscopy 2007, Versaille, Paris, May 9, 2007.
- 405. "Endoscopic resection of pituitary and parasellar tumors" Endocrinology Grand Rounds, Columbia-Presbyterian Medical Center, New York, NY, Mar. 9, 2007.
- 406. "Endoscopic, transethmoidal, transcribriform, transfovea ethmoidalis approach to the anterior fossa", The Lende Meeting, SLC, Utah, Feb 3, 2007.
- 407. "Frequency dependent hemodynamic responses to direct bipolar cortical stimulation", The American Academy of Neurological Surgery, Greensboro, GA, Oct, 19, 2006.
- 408. "Late seizures in patients initially seizure-free after epilepsy surgery", Congress of Neurosurgery, Chicago, IL, Oct. 9, 2006.
- 409. "Endoscopic, endonasal extended transplanum, transtuberculum approach for resection of suprasellar lesions", Congress of Neurosurgery, Chicago, IL, Oct. 9, 2006.
- 410. "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.
- 411. "Endoscopic Skull Base Surgery", GE Healthcare Conference, The Latest Advances in Neurosurgery, Congress of Neurosurgery, Chicago, IL, Oct. 9, 2006.

- 412. "Endoscopic transethmoidal, transcribriform approach", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.
- 413. "Endoscopic approach to the suprasellar cistern", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.
- 414. "Endoscopic skull base anatomy and corridors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.
- 415. "Endoscopic resection of pituitary tumors", Advanced Endoscopic Skull Base and Pituitary Surgery, Weill Cornell Medical College, New York, NY, June 9-10, 2006.
- 416. "Endoscopic transtuberculum, transplanum approach" 6th International Hands-on Workshop, Endoscopic Endonasal Skull Base Surgery, Naples, Italy, May 22, 2006.
- 417. "Endonasal, endoscopic transtuberculum, transplanum approach to the suprasellar cistern" Lende Meeting, Salt Lake City, Utah, Feb 8, 2006.
- 418. "Surgical treatment of epilepsy" Advances in Epilepsy, New York Methodist Hospital, Brooklyn, NY Feb. 3, 2006.
- 419. "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.
- 420. "Endoscopic skull base surgery" in New Advances in Neurosurgery, Congress of Neurosurgery, Boston, MA Oct. 10, 2005.
- 421. "Optical mapping of voltage, perfusion and oximetry during epilepsy insights into neurovascular coupling", Neurology Grand Rounds, Albert Einstein College of Medicine, Sept. 16, 2005.
- 422. "Endoscopic parasellar surgery and intraoperative MRI", Advanced Endoscopic Skull Base Surgery, Weill Cornell Medical College, May 13, 2005.
- 423. "Endoscopic resection of craniopharyngiomas and Rathke's cleft cysts", Advanced Endoscopic Skull Base Surgery, Weill Cornell Medical College, May 13, 2005.
- 424. "Endoscopic Transnasal resection of anterior skull base meningiomas" Advanced Endoscopic Skull Base Surgery, Weill Cornell Medical College, May 13, 2005.
- 425. "Endoscopic pituitary surgery in an intraoperative MRI," North American Skull Base Society, Toronto, Canada, April 9, 2005.
- 426. "New horizons in endoscopic skull base surgery," North American Skull Base Society, Toronto, Canada, April 7, 2005.
- 427. "Optical imaging of neocortical epilepsy", New York State Neurosurgical Society, Naples, Florida, Feb. 25-27, 2005.
- 428. "Minimally invasive image-guided endoscopic skull base and pituitary surgery," New York State Neurosurgical Society, Naples, Florida, Feb. 25-27, 2005.
- 429. "Optical imaging of neocortical epilepsy" NYU Epilepsy Research Conference, Department of Neurology, NYU Medical Center, February 16, 2005.
- 430. "Combined endoscopic pituitary surgery with intraoperative MRI", Richard Lende Neurosurgery Conference, January 30, 2005.
- 431. "Endoscopic, image-guided pituitary and skull base surgery" Grand Rounds, Department of Neurosurgery, NYU Medical Center, January 28, 2005.

- 432. "Image-Guided Brain Tumor Surgery" Grand Rounds, Department of Rehabilitation Medicine, Weill Cornell Medical College, January 4, 2005.
- 433. "Minimally invasive skull base and pituitary surgery" Grand Rounds, Department of Neurology and Neuroscience, Weill Cornell Medical College, Nov 4, 2004.
- 434. "New Developments in Brain Mapping" Plenary Session, Congress of Neurological Surgeons, San Francisco, CA, Oct 21, 2004
- 435. "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
- 436. "Surgical treatment of primary brain tumors" New York Roentgen Society, Rockefeller University, New York, N.Y. April 14, 2004.
- 437. "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.
- 438. "Image-guided neurosurgery. Intraoperative MRI and endonasal endoscopic approaches in the treatment of pituitary tumors", Grand Rounds, Department of Otolarhyngology, Weill Cornell Medical College, March 4, 2004.
- 439. "The surgical treatment of epilepsy" Salzburg Weill Cornell Seminar, Schloss Leopoldskron, Salzburg, Austria, March 2, 2004.
- 440. "Late failure after initially successful epilepsy surgery." Investigator's Workshop, American Epilepsy Society, Boston, December 9, 2003
- 441. "Pediatric epilepsy surgery." Grand Rounds, Department of Pediatrics, Weill Cornell Medical College, Uris Auditorium, December 2, 2003.
- 442. "Optical imaging of epileptiform events in an acute rat model." Neurosurgical Society of America, Sunriver OR, 2003
- 443. "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
- 444. "In vivo optical imaging of neocortical epilepsy" Intrinsic Optical Signal in the Brain, Symposium at the American Physical Society Meeting, March 7, 2003.
- 445. "Optical imaging of epileptiform events in an acute in vivo model." New York Neurosurgical Society, New York, NY, 2003.
- 446. "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.
- 447. "Brain mapping in the treatment of brain tumors and epilepsy" Brain Interest Group, Weill Medical College, January 24, 2003.
- 448. "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.
- 449. "Surgery for epilepsy" Fourteenth Annual Long Island Regional Conference, Epilepsy Foundation of Long Island, Melville, NY. November 7, 2002

- 450. "Intraoperative brain mapping in the neurosurgical treatment of brain tumors and epilepsy." The Goldenberg Lectureship, St. Francis Hospital, West Hartford, CT, November 6, 2002.
- 451. "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
- 452. "Frameless stereotactic placement of depth electrodes for epilepsy using the StealthStation Surgical Navigation system." American Academy of Neurological Surgery, Phoenix, AZ 2002.
- 453. "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.
- 454. "In vivo optical imaging of neocortical epilepsy" Lester Wolfe Workshop in Laser Biomedicine, Massachusetts General Hospital, Boston, MA 2002.
- 455. "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.
- 456. "Frameless stereotactic placement of depth electrodes for epilepsy using the StealthStation Surgical Navigation system". Society for University Neurosurgeons, Chicago, IL 2002.
- 457. "Brain mapping in the treatment of brain tumors and epilepsy." Neuroscience Grand Rounds, Winthrop Hospital, Mineola, NY February 12, 2002.
- 458. "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.
- 459. "In vivo optical imaging of neocortical epilepsy." Investigators Workshop "Recording from Large Neural Networks What can we Learn from Novel Techniques?" American Epilepsy Society, Philadephia, PA December 16, 2001
- 460. "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
- 461. "Cortical mapping." Neuroscience: Update for the New Millennium. A National Seminar, Marriott Hotel, New York, NY December 14, 2001
- 462. "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.
- 463. "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.
- 464. "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.
- 465. "Intraoperative brain mapping." Grand Rounds, Department of Neurology. Weill Cornell Medical College, New York Presbyterian Hospital. October 3, 2001

- 466. "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
- 467. "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
- 468. "The role of re-operation for recurrent seizures after epilepsy surgery". Lende Meeting, Salt Lake City, UT, 2001
- 469. "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
- 470. "Endoscopic third ventriculostomy in pediatric patients." Department of Pediatrics, Jersey City Medical Center. November 4, 2000
- 471. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Radiology, University of Medicine and Dentistry in New Jersey. October 17, 2000
- 472. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Neurosurgery, University of Medicine and Dentistry in New Jersey. October 17, 2000
- 473. "Epilepsy surgery." Department of Surgery, Jersey City Medical Center New Jersey. October 4, 2000
- 474. "In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Neurosurgery, University of Medicine and Dentistry in New Jersey. April 4, 2000
- 475. "In vivo optical imaging of neocortical epilepsy." Department of Neurobiology, Yale University, New Haven, CT. March 16, 2000
- 476. "In vivo optical imaging of neocortical epilepsy and surround inhibition." The Academy of Neurological Surgeons, Colorado Springs, CO, 2000.
- 477. "In vivo optical imaging of neocortical epilepsy." Epilepsy Conference, Yale University, New Haven, CT. February 23, 2000.
- 478. "In vivo optical imaging of neocortical epilepsy." The Congress of Neurological Surgeons, San Antonio, TX 2000.
- 479. "In vivo optical imaging of neocortical epilepsy." 3rd Pan Pacific Neurosurgery Conference, Big Island, Hawaii, 2000.
- 480."In vivo optical imaging of neocortical epilepsy." Department of Neurosurgery, SUNY Downstate. November 23, 1999
- 481."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
- 482."In vivo optical imaging of neocortical epilepsy and surround inhibition." Department of Neurophysiology, Max-Planck Institüt für Neurobiologie, Munich, Germany. October 16, 1999
- 483. "The organization of language in the human brain." Departments of Neurology and Neurosurgery, Leahy Clinic, MA. March 23, 1999

- 484. "Spontaneous neuronal activity in layer I of the developing neocortex." Department of Neurosurgery, New York Medical College, Valhalla, NY. January 8, 1999.
- 485. "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.
- 486. "The organization of language in the epileptic brain." Epilepsy Conference, Columbia University, New York, NY. November 15, 1998.
- 487. "Ventricular volume following third ventriculostomy." The Congress of Neurological Surgeons, Seattle, WA 1998.
- 488. "Networks of coactive neurons in developing layer I." The New York Neurosurgical Society, New York, N.Y. 1998.
- 489. "Stereotactic, endoscopic third ventriculostomy in the treatment of non-communicating hydrocephalus". Department of Pediatrics, New York Presbyterian Hospital, New York, NY. September 27, 1998.
- 490. "Stimulation mapping of Wernicke's area: location, variability and overlap between naming, reading and arrest of speech". American Epilepsy Society, Boston, MA 1997.
- 491. "Spontaneous neuronal activity in layer I of the developing neocortex." Department of Neurosurgery, The Neurological Institute of New York, NY. May 12, 1998.
- 492. "Cajal-Retzius cells and the role of spontaneous layer I activity in the developing neocortex". The Congress of Neurological Surgeons, New Orleans, LA 1997.
- 493. "Preoperative predictors of anterior temporal language areas." The Congress of Neurological Surgeons, New Orleans, LA 1997.
- 494."The organization of language in the epileptic brain." Department of Neurosurgery, The Neurological Institute of New York, NY. July 7, 1997.
- 495. "Cajal-Retzius cells and the role of spontaneous layer I activity in the developing neocortex." The American Academy of Neurological Surgeons, Banff, Canada 1997.
- 496. "Single unit recording from human temporal lobe during naming, reading and linematching." Department of Biology, Columbia University. New York, NY. March 3, 1997.
- 497. "Stereotactic, endoscopic third ventriculostomy in the treatment of non-communicating hydrocephalus." Department of Neurosurgery, The Neurological Institute of New York, NY. May 26, 1996.
- 498. "Third ventriculostomy: clinical and radiographic follow-up in 27 patients." Joint International Congress on Minimally Invasive Techniques in Neurosurgery and Otolaryngology, Pittsburgh, PA 1995.
- 499. "Spontaneous neuronal activity in layer I of the developing neocortex." Department of Neurosurgery, The Neurological Institute of New York, NY. April 8, 1995.
- 500. "Reading errors during right hemisphere injection of sodium amytal." Congress of the European Association of Neurological Surgeons, Berlin, Germany 1995.
- 501. "Perimesencephalic nonaneurysmal subarachnoid hemorrhage." Department of Neurosurgery, The Neurological Institute of New York, NY. May 15, 1994.
- 502. "Single unit recording from human temporal lobe during naming, reading and line-matching" Department of Neurosurgery, University of Washington, Seattle, WA. February 10, 1993

Hudolef

Hundolf Tunkover Hundolf

Signature Date