LSU Neurotology Fellowship

FELLOWSHIP CANDIDATE VISIT

Overview

ACGME Initial Accreditation 2013

1 Fellow per 2-year Cycle

Fellowship Graduates

- Sam Spear, MD Completed fellowship June 2015; Lt Col, USAF, currently practicing at San Antonio Military Medical Center
- Rahul Mehta, MD Advanced Otology/Rhinology (1 year) completed June 2014; now LSU Otolaryngology faculty

Current Fellow

∘ Joshua Sappington, MD – 2nd Year



The LSU Neurotology-Skull Base Fellowship

Comprehensive skull base experience

Full spectrum of otology/neurotology

Significant experience with:

- Rhinologic endoscopic & transfacial skull base approaches
- Craniofacial techniques
- Neurosurgical aspects of care
- Neuroradiology, skull base histopathology
- Skull base reconstruction

Program Sites

LSU New Orleans

- Sponsoring Institution
- Otolaryngology Residency with 17 residents in PGY1-PGY5

Our Lady of the Lake Regional Medical Center

Primary Institution

Additional sites:

- West Jefferson Medical Center
- Children's Hospital New Orleans
- o Ochsner Medical Center New Orleans

Neurotology Core Faculty

Moises A. Arriaga, MD

- Fellowship Program Director
- Neurotology

Alexander Sevy, MD

Neurotology

Laura Hetzler, MD

- Residency Director
- Facial plastic surgery
- Facial reanimation

Daniel Nuss, MD

- Chairman
- Endoscopic skull base surgery

Additional Program Faculty

Frank Culicchia, MD

- Neurosurgery Chairman
- West Jefferson cases

Kelly Scrantz, MD

- Neurosurgery NMC
- Baton Rouge cases

Rahul Mehta, MD

Advanced Otology/Rhinology



The LSU ENT Clinical Faculty:

Phillip Allen, MD

Moises Arriaga, MD

Henry Barham, MD

R. Graham Boyce, MD

Bradley Chastant, MD

Jennifer Daigle, MD

Michael DiLeo, MD

Michael Dunham, MD

Celeste Gary, MD

Michael Hagmann, MD

Laura Hetzler, MD

Jeffrey Hotaling, MD

Jeffrey Joseph, MD

Sohit Kanotra, MD

Kevin McLaughlin, MD

Andrew McWhorter, MD

Rahul Mehta, MD

Daniel Nuss, MD

Robert Peden, MD

Laura Pelaez, MD

Anna Maria Pou, MD

Justin Tenney, MD

Rohan Walvekar, MD



Fellowship Philosophy

Neurotology clinical training: Excellence in all aspects of surgical and office neurotology as outlined by the ACGME

Anterior Endoscopic Skull Base training: Skills in true threedimensional tumor management

Robust research opportunities: Clinical, basic and translational science related to neurotology

Our Lady of the Lake Regional Medical Center



Baton Rouge

- South Louisiana's major academic hospital
 - OLOL Pediatrics Residency
 - 5 LSU residencies (EM, IM, surgery, psychiatry, ENT) rotate here as well as OMFS and several outside programs
 - ° Schools of Nursing, PA, Resp. Therapy, Rad Tech, PT Assist
- o Over 600 beds
- o Largest hospital in Louisiana
- o LSU Voice Center, OLOL/Mary Bird Perkins Head and Neck Center
- * Gamma Knife Icon
- Extensive commitment to education

Clinical Resources – Baton Rouge

OLOL Hearing and Balance Center

- Adult and Pediatric Neurotology Skull Base
- Active Vestibular Team
 - 6 Audiologists and 2 Vestibular Physical Therapists
- Facial Rehabilitation Team
- Adult and Pediatric CI Center
- OLOL Head and Neck Center Oncology and Anterior Skull Base Surgery
- Gamma Knife ICON
- NeuroMedical Center Partnership

Fellow Activities: Clinic and OR and most conferences

West Jefferson Medical Center



New Orleans

- Adult Neurotology Skull Base
- Active Vestibular Team
 - 3 Audiologists and 2 Vestibular Physical therapists
 - Part of Neurosurgery / Neurology Group
- Adult CI Center
- o Pediatric CI through Childrens Hospital New Orleans
- Close collaboration with LSU Neurosurgery and Anterior Skull Base Surgery with Dr. Nuss
- Cyberknife

Fellow Activities: OR, Neurosurgery Rotation, Cyberknife Rotation



Research Resources

Basic Science collaborators

- o Jennifer Lentz, PhD, Ham Farris, PhD
- School of Allied Health

Anatomic Collaboration

Center for Advanced Practice

Clinical Studies

o Prospective (Otonomy, Balloon), Retrospective Clinical

Fellowship Specifics

- PhD Research Coordinator
- PhD Research Audiologist
- Funding for Statistician
- · Research Rotation or Research Time
- MD Fellowship Coordinator



Fellow Research Presentations/Publications

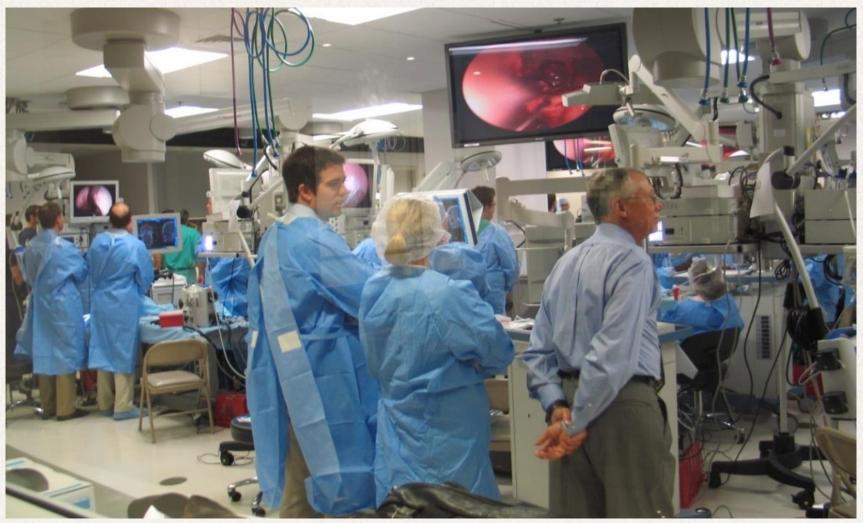
- SCD v Thin Torok Award ANS
- SCD in Pediatrics AOS
- Temporal Bone Encephalocele Repair- NASBS
- EAC Carcinoma with parotid and facial nerve involvement -NASBS
- Skull Base Adenocystic CA NASBS
- CI and Cautery
- CI Trajectory
- MRI Prediction in DSC

- Encephalocele Repair Technique
- MRI Techniques in Acoustic Neuroma
- Pediatric Skull Base Tumors
- Unusual Temporal Bone Carcinoma
- CSF Leak Prevention in AN
- Hydroxyapatite Cement Removal
- Hearing Preservation in AN
- Haste Imaging Pitfalls
- Carotid Resection in SBS



Three Annual Temporal Bone Courses with National Faculty





The Russell Klein, MD Center for Advanced Practice



LSU Temporal Bone Dissection Course – December 7-8, 2012

Sample Fellow operative experience (through 13 months)

Approaches for Skull Base Surgery				
	Middle fossa approach for removal of tumor	12		
	Posterior fossa approach for removal of tumor	52		
	Combined approach for CPA	1		
	Decompression of IAC	1		
	Repair encephalocele	23		
	Total Approaches For Skull Base Surgery	89		
Resection of Neurotologic Tumors				
	Paraganglioma tumor surgery	7		
	Extradural/petrous apex	1		
	IAC lesions	8		
	Cavernous sinus, extradural	1		
	Kawase triangle, intradural	1		
	Facial nerve tumor	1		
	Retrosigmoid, extradural	2		
	Retrosigmoid, intradural	20		
	Translabyrinthine	27		
	Total Resection of Neurologic Tumors	68		
Temporal Bone Resection				

Reconstruction After Resection of Neurotologic Tumors				
	By tissue graft (fat, fascia, etc)	64		
	By local or regional vascularized flap	4		
	Total Reconstruction After Resection of Neurotologic Tumors	68		
Vestibular Surgery				
	Endolymphatic sac surgery	16		
	Labyrinthectomy-transcanal	1		
	Labyrinthectomy-transmastoid	11		
	Middle ear perfusion	3		
	Semicircular canal dehiscence repair	2		
	Vestibular nerve section	3		
	Total Vestibular Surgery	36		
Repair CSF Leak				
	Middle cranial fossa	17		
	Transmastoid	4		
	Total Repair CSF Leak	21		



Fellow operative experience (continued)

Rehabilitative Surgery					
	Congenital aural atresia	4			
	Cochlear implantation	45			
	Auditory brainstem implant	0			
	Electromagnetic hearing device	1			
	Electromagentic hearing device removal/repair	0			
	Osseointegrated implant	25			
	Osseointegrated implant replacement	0			
	Stapedectomy	26			
	Total Rehabilitative Surgery	101			
Stereotactic Radiation for Skull Base Lesions					
	One complex lesion	2			
	Application of stereotactic frame	0			
	Total Stereotactic Radiation for Skull Base Lesions	2			
D	iagnosis				
	Paraganglioma tumor	5			
	Vestibular schwannomas	53			
	Facial nerve tumors	4			
	Vestibular disease	32			

Facial Nerve Surgery				
Decompression: lateral to geniculate ganglion	6			
Decompression: total-transtemporal	2			
Facial nerve repair: intratemporal	2			
Facial nerve repair: extracranial	1			
XII-VII anastomosis	0			
Nerve graft harvest	1			
Facial nerve repair: medial to geniculate ganglion	0			
Total Facial Nerve Surgery	12			
Middle Ear and Mastoid				
Tympanoplasty	88			
Tympanomastoidectomy	58			
Mastoidectomy	87			
Revision mastoidectomy	20			
Mastoid obliteration	0			
Middle ear exploration	1			
Perilymph fistula repair	9			
Ear canal procedures	5			
Total Middle Ear and Mastoid	268			
GRAND TOTAL 768				



- Daily Schedule

- o M: AM Clinic OLOL or Surgery Vista (LSU Health BR) or surgery Children's NO
- o T: AM/PM Surgery OLOL
- W: OLOL Clinic or Endoscopic Surgery
- o Th: WJMC Surgery
- o F: Research / Surgery / Clinic

- Off- Service Rotations

- One- or two-week rotations:
 - Neurology NeuroMedical Center Baton Rouge
 - Radiation Therapy
 - Cyberknife WJMC
 - Gamma Icon OLOL-MBP (acquired October 2016)
 - Neuroradiology OLOL Baton Rouge
 - Neuro-ophthalmology New Orleans or LSUBR
 - Audiology/Electrophysiology OLOL BR
 - Physical Therapy Vestibular/Facial OLOL BR
- One-month rotation:
 - Neurosurgery WJMC New Orleans



- Didactics

Conferences:

- Textbook Review Weekly Monday
- Otolaryngology Didactic Day Monthly
- Journal Club –
- Multidisciplinary Neurology / Neurosurgery / PT / Radiology Mondays at Neuromedical Center
- Neuroradiology Monthly
- Otopathology Quarterly
- Otology Lectures for Residents Monthly
- Cochlear Implant Conference q2 months
- Vestibular Conference q2 months



- Responsibilities

Call – Service

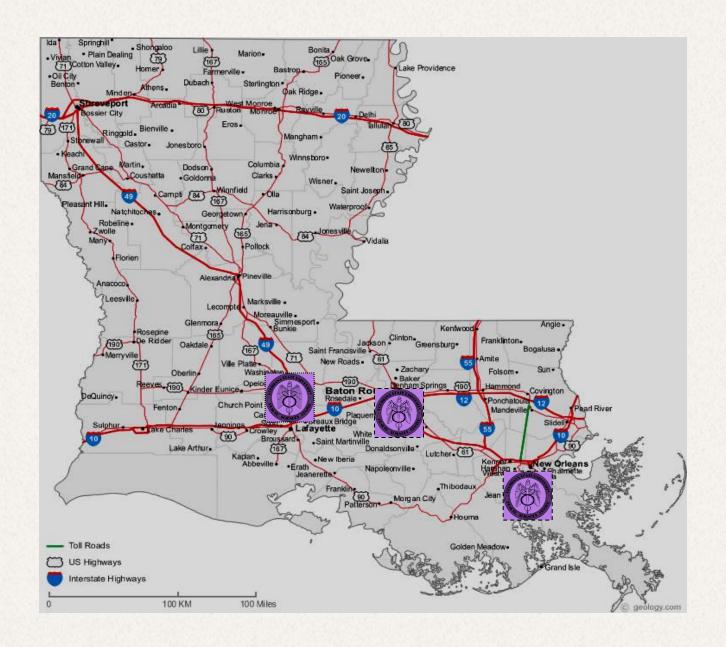
- Telephone Call Primary
- Backup Residents

Resident – Fellow Interactions

- Otology
 - Residents Primary OLOL (Two Rooms Tuesday)
 - Fellow Primary WJMC
 - Resident Case Coverage Vista
- Neurotology Fellows Primary
- ° Neurosurgery Residents WJMC Only collaborative

LSU Otolaryngology Overview

- o 70% Otolaryngologists in Louisiana
- o 3-City Residency Program
- o 2-City Fellowship
- Post Katrina Evolution



Practical matters – this is a regional fellowship

- Fellow lives in Baton Rouge
- A studio apartment is provided in New Orleans at no cost to the fellow

Summary

- Comprehensive Training
 - Clinical, Surgical, All Aspects
- Integrated into Larger Head and Neck/SBS Program
- Key Clinical Responsibilities
- Abundant Research Opportunities
- O Progressive Responsibility in OR and Patient Care