UNIVERSITY OF COLORADO NEUROTOLOGY FELLOWSHIP

- University of Colorado Hospital is the only academic medical center in the Eastern Rocky Mountain region and serves all of Colorado and portions of Wyoming, Nebraska, Kansas and New Mexico.
- 5 Neurotology Faculty (Cass, Gubbels, Nassiri, Formeister, Agrawal)
- 75 Vestibular schwannoma treated per year (50 cases with surgery 50/50% RS and TL, 25 with SRS)
- 30 Complex combined skull base approaches per year
- 15 Middle fossa cases (primarily vestibular schwannoma, anterior petrosectomy, and encephalocele repair) per year
- The fellow will be given 20% of their FTE (1 day per week) for education, scholarly activities and research
- The fellow will have the opportunity to attend the University of Colorado annual skull base course and North American Skull Base annual meeting
- The department has clinical research coordinators that will provide the fellows with support for IRB submission, database management, and statistical services
- General ENT UCH call is anticipated, max 3 weeks a year

NEUROTOLOGY TEACHING PROGRAM

Type	Frequency
Neurotology Journal Club Fellow will be responsible for selecting topics and journal articles to review with faculty and residents.	Quarterly (1 hour)
Neurotology Didactic Series These will be provided by faculty within the Neurotology Core Faculty, Neurosurgery, and key related specialties (Radiation Oncology, Neuro-ophthalmology, Audiology, Vestibular Disorders, Neurology, and PM&R).	Twice a month (1 hour)
Clinical Specialty Sessions These will include audiology and vestibular disorders, vestibular and facial nerve physical therapy, pathology, neuro-ophthalmology, radiation oncology, neuroradiology, and neurology (Headache Clinic, Movement Disorders, PM&R). The fellow will spend time with faculty in these key areas to learn how they evaluate and treat patients with conditions relevant to neurotology.	Monthly (2-4 hours each session)

Type	Frequency
Combined Interdisciplinary Skull Base Educational Conference Fellows will prepare for and participate in the Skull Base Conference both presenting cases and engaging in the discussion of cases presented by other disciplines. Neurotology core faculty attend these conferences as well as faculty from neurosurgery, radiation oncology, PM&R, and neuroradiology.	Twice a month (2 hours each session)
Departmental Grand Rounds Include once a month QIPS conference, once a month faculty presentation, once a month resident presentation, and once a month department faculty meeting	Weekly (1 hour)
Cochlear Implant Team Meeting	Monthly (1 hour)
Otology/Neurotology Section Meeting	Monthly (1 hour)
Research Seminars Fellow will attend research seminars with outside guest experts when topics are pertinent to neurotology.	Monthly (1 hour)

Type	Frequency
University of Colorado Annual Skull Base Course Fellows will have blocked clinical schedules to participate in these courses which involve lectures, teaching opportunities, and hands-on learning in the cadaver lab. This course has a significant amount of didactics delivered by local, national and international faculty. A highlight is in-depth training using the Rhoton Collection and 3D viewing of the temporal bone, posterior cranial fossa, jugular foramen, and upper neck anatomy (4 lectures total).	Once a year (3 days total)
Otology Teaching Block Includes lectures and temporal bone cadaver lab. The fellow will have an opportunity to teach, learn, and practice surgical skills in cadaver lab.	5 days a year (4 hours each day)

Type	Frequency
Non-Specialty Specific Lectures Professionalism in the workplace Critical assessment of the literature Skills for Negotiation Coding and Billing DEI Epidemiology Statistical methods Experimental Design Manuscript preparation	6 times a year in conjunction with the Otolaryngology curriculum
Multidisciplinary Vestibular Educational Case Conference Includes neurotology, neurology, neuro-ophthalmology, physical medicine and rehabilitation and rehabilitation physicians and vestibular physical therapists.	Once a month

INSTITUTIONAL OPERATIVE DATA 2024

	CPT Code(s)	Total					
	Approaches for Skull Base Surgery						
Middle fossa approach for removal of tumor	61590, 61591, 61592, 66970	6					
Posterior fossa approach for removal of tumor							
PROCEDURE CATEGORIES	61526, 61595	23					
Retrosigmoid/ suboccipital	61595 61520 61526	26					
Transcococochlear	61596	2					
Transcondylar	61597						
Transpetrosal	61598	3					
Combined approach for cerebellopontine angle (CPA)	61530	14					
Decompression of internal acoustic canal (IAC)	69960	5					
	Repair Encephalocele						
Posterior fossa	62121, 61519,	1					
Middle fossa	62120 62100	6					
	Resection of Neurotologic Tumors						
	Paraganglioma tumor surgery						
Jugulare, extradural	69554, 61615 61590 61591 61592	8					
Jugulare, intradural	61616	1					
Tympanicum	69550, 69552	1					
Extradural/petrous apex	61605	1					
IAC lesions	61606	3					
Cavernous sinus, extradural	61607						

	CPT Code(s)	Total					
Kawase triangle, intradural	61608	2					
Facial nerve tumor	69970						
Retrosigmoid, extradural	61615						
Retrosigmoid, intradural	61518, 61519, 61616	26					
Translabyrinthine	61616, 61526, 61530	23					
	Temporal bone resection						
Temporal bone resection	69150, 69155, 69535	15					
	Reconstruction after Resection of Neurotologic Tumors						
By tissue graft (fat, fascia, etc.)	61618, 20926 15769	33					
By local or regional vascularized flap	61619						
	Vestibular Surgery						
Endolymphatic sac surgery	69805, 69806	3					
Labyrinthectomy-transcanal	69905						
Labyrinthectomy-transmastoid	69910	1					
Middle ear perfusion (i.e., steroids or aminoglycosides)	69801						
Semicircular canal dehiscence repair	61590 1069949	17					
Vestibular nerve section	69950						
	Rehabilitative Surgery						
Congenital aural atresia	69310, 69320	5					
Cochlear implantation	69930	130					
Auditory brainstem implant	61860, 61875						
Electromagnetic hearing device	69710						
Removal/repair	69711						

	CPT Code(s)	Total					
Osseointegrated implant	69714, 69715	17					
Replacement	69717, 69718						
Stapedectomy	69650, 69660, 69661, 69662	49					
	Repair Cerebrospinal Fluid Leak						
Middle cranial fossa	62100	3					
Transmastoid	69670	4					
	Stereotactic Radiation for Skull Base Lesions						
One complex lesion	61798	26					
Application of stereotactic frame	61800	25					
	Facial Nerve Surgery						
Decompression: lateral to geniculate ganglion	69720	6					
Decompression: total-transtemporal	69725, 69955	1					
Facial nerve repair: intratemporal	69740	2					
Facial nerve repair: extracranial	64864						
XII-VII anastomosis	64868						
Nerve graft harvest	64885, 64886						
Facial nerve repair: medial to geniculate ganglion	69745						
	Middle Ear and Mastoid						
Tympanoplasty	69610, 69620, 69631, 69632, 69633	117					
Tympanomastoidectomy	69635, 69636, 69637, 69641, 69642, 69643, 69644,	50					

	CPT Code(s)	Total					
	69645, 69646						
Mastoidectomy	69501, 69502, 69505, 69511	23					
Revision mastoidectomy	69601, 69602, 69603, 69604, 69605	7					
Mastoid obliteration	69670						
Middle ear exploration	69440, 69450	2					
Perilymph fistula repair	69666, 69667						
Ear canal procedures	69140, 69145, 69205, 69222, 69420, 69421, 69424, 69433, 69436	17					

Add columns as needed.

DIAGNOSES	# of admissions	# of patient visits
Paraganglioma tumor	2	12
Vestibular schwannoma (acoustic neuroma)	62	653
Facial nerve tumor	1	12

DIAGNOSES	# of admissions	# of patient visits
Meniere's disease H81.01,02,03, 09		510
Vestibular migraine, Migraine with vertigo G43.109; G43.809		394
Vestibular hypofunction H83.2x9		54
Vestibular Neuronitis H81.20		
Superior Semicircular canal dehiscence H83.8x1,2,3		52
BPV H81.10		2491