

Curriculum Vitae

Dr Kumar Abhinav

Affiliation: BSc. (Hons.), MBBS, MD, FRCS (Neurosurgery)

Current Position: Consultant (Attending) Neurosurgeon, Cranial [Skull Base (Endoscopic and open), Pituitary and Vascular Neurosurgery] and Spine, Department of Neurological Surgery, Institute of Clinical Neuroscience, Southmead Hospital, Southmead Road, Bristol BS10 5NB, UK

Subspecialty interests: Complex cranial [Skull Base (open and expanded endoscopic endonasal approaches, complex pituitary and Cerebrovascular] Neurosurgery

Nationality: British

Biosketch Summary

I completed my neurosurgical training in the United Kingdom as part of the South-West national neurosurgery training programme (Bristol/ Plymouth). My clinical and academic interests are in skull base (endoscopic and open), pituitary and vascular neurosurgery. I completed one year clinical operative fellowship in open vascular and skull base neurosurgery under the mentorship of Dr Gary K. Steinberg at the Department of Neurosurgery, Stanford University, Stanford, USA. Following that I completed a further one year clinical operative fellowship in skull base focussing on advanced open and endoscopic endonasal surgical techniques under the mentorship of Dr Juan C. Fernandez-Miranda at the Department of Neurosurgery, Stanford University, Stanford, USA. I am passionate about surgical neuroanatomy research. I have a specific research interest in the structural and functional connections of the human brain using advanced white matter imaging techniques. I furthered these interests through anatomical dissections and imaging research over two-years as a funded postdoctoral research associate in the Skull base and fiber tractography laboratory, University of Pittsburgh Medical Centre, Pittsburgh, USA under the mentorship of Drs. Juan C Fernandez-Miranda and Robert Friedlander.

Qualifications

2020 Doctor of Medicine (MD), University of Liverpool, Liverpool, United Kingdom
Post-Doctoral Research Associate in Skull base neurosurgery and fiber tractography (funded by the *University of Pittsburgh Brain Institute, Pittsburgh*)

and The Royal Society of the Medicine, London), Center for Cranial Base Surgery, Department of Neurological Surgery, University of Pittsburgh Medical Center (UPMC), Pittsburgh

- 2017 Certificate of completion of training (CCT) in Neurosurgery, Joint Committee on Surgical Training, United Kingdom
- 2016 Fellowship of the Royal College of Surgeons of England (Neurosurgery) [FRCS (SN)]
- 2010-13 United States Medical Licensing Exam
- Step 1 and Step 2 CK: 2 digit scores of 97 and 99 respectively; STEP 2 CS: Pass; ECFMG certified (Certificate Issue Date: Dec 9, 2011)
 - Step 3 examination: Pass (Aug 2013)
- 2008 Intercollegiate Membership of the Royal College of Surgeons (MRCS) of England examination (Nov 2008), The Royal College of Surgeons of England, London, UK
- 2005 Bachelor of Medicine and Bachelor of Surgery (MBBS) (Aug 1999- Jul 2005), King's College London School of Medicine at the Guy's, King's College and St Thomas' Hospitals, University of London, London, UK
- 2001-02 Bachelor of Science (BSc.) (Hons.) Radiological Sciences (Sept 2001- Jul 2002), King's College London School of Medicine at Guy's, King's College and St Thomas' Hospitals, University of London, London, UK
- 1999 A Levels (Mathematics: Grade A; Physics: Grade A; Chemistry: Grade A; Biology: Grade B), Westminster School, London, UK

Employment History

- 2019- Consultant (Attending) Neurosurgeon, [Skull Base (Endoscopic and open), Pituitary and Vascular Neurosurgery], Department of Neurological Surgery, Institute of Clinical Neuroscience, Southmead Hospital, Southmead Road, Bristol BS10 5NB, UK
- 2018- 2019 Clinical Instructor/ Clinical fellow, Skull Base (open and endonasal) Neurosurgery, Department of Neurosurgery, Stanford University School of Medicine, Stanford, USA (Mentor: Dr Juan C. Fernandez-Miranda)
- 2017- 2018 Clinical Instructor/ Clinical fellow, Cerebrovascular and open skull base Neurosurgery, Department of Neurosurgery, Stanford University School of Medicine, Stanford, USA (Mentor: Gary K. Steinberg)

- 2017 Senior Neurosurgery trainee in a national (South West Neurosurgery) training programme (ST 8), Department of Neurosurgery, Southmead Hospital, University of Bristol (Severn Deanery School of Surgery), Bristol, UK
- 2015 – 2017 Senior Neurosurgery trainee in a national (South West Neurosurgery) training programme (ST 6 - ST 8), Department of Neurosurgery, Derriford Hospital, Plymouth, UK
- 2013 – 2015 Post-Doctoral Research Associate in Skull base (open and endoscopic) neurosurgery and fiber tractography (funded by the *University of Pittsburgh Brain Institute, Pittsburgh and The Royal Society of the Medicine, London*), Skull Base and Fiber Tractography Laboratory, Center for Cranial Base Surgery, Department of Neurological Surgery, University of Pittsburgh Medical Center (UPMC), UPMC Presbyterian, Pittsburgh, USA (Mentors: Drs. Juan C. Fernandez-Miranda and Robert Friedlander)
- 2007 – 2012 Neurosurgery trainee in a national (South West Neurosurgery) training programme [ST 1-6 (6 months of ST6)], Department of Neurosurgery, Frenchay Hospital, University of Bristol, Bristol (Severn Deanery School of Surgery), UK
- 2005 - 2007 Foundation Years 1 & 2: General Practice, General Medicine and Adult Neurosurgery, Princess Royal Hospital and Hurstwood Park Neurological Centre, Haywards Heath, West Sussex and Queen Elizabeth Hospital, Stadium Road, London, UK

Honorary Position

- 2005- 2008 Honorary Research Associate, MRC Centre for Neurodegeneration Research, Institute of Psychiatry, King's College Hospital, London, UK
Awarded for an epidemiological study aimed at collecting and analysing details of ALS/MND patients in South East England through a population-based registry (Mentors: Dr Ammar Al-Chalabi, Professor P Nigel Leigh)

Awards and Prizes

- 2014-2015 Coakham Cup for Academic Achievement, South West Neurosurgery Training Programme, Severn Deanery School of Surgery, Bristol, UK

- 2013-2014 Ellison-Cliffe Fellowship Award, The Royal Society of Medicine, London for research fellowship at the Department of Neurological Surgery, University of Pittsburgh Medical Center, USA
- 2013 Codman Travelling Fellowship, Society of British Neurological Surgeons for research fellowship at the Department of Neurological Surgery, University of Pittsburgh Medical Center, USA
- 2011-12 Nominated for the '*Senior trainee of the year*' award, Severn Deanery School of Surgery, Bristol, UK (nominated for outstanding clinical and academic performance as a neurosurgical trainee)
- 2011-2012 Coakham Cup for Academic Achievement, Department of Neurosurgery, Frenchay Hospital, Severn Deanery School of Surgery, Bristol, UK
- 2009-2010 Nominated for the '*Senior trainee of the year*' award, Severn Deanery School of Surgery, Bristol, UK (nominated for outstanding clinical and academic performance as a neurosurgical trainee)
- 2008-2009 Nominated for the '*Core surgical trainee of the year*' award, Severn Deanery School of Surgery, Bristol, UK (nominated for outstanding clinical and academic performance as a junior neurosurgical trainee)
- 2005 Surgical House Officer Presentation Prize: 'Separation of Craniopagus Twins', Department of Surgery, Queen Elizabeth Hospital, London, UK
- 2005 Honorary Research Associate position, MRC Centre for Neurodegeneration Research, Institute of Psychiatry, King's College London, London, UK
- 2004 Guy's, King's and St Thomas' School of Medicine *Elective Travel Award* for neurological research at the Johns Hopkins Hospital, Baltimore, USA
- 1998 Fred Darcy Prize for Creative Writing in Upper Sixth Form, Westminster School, London, UK

Publications

Book (Published)

- **Abhinav K**, Edwards R, Whone A. Rapid Neurology and Neurosurgery. 1st edition. *Wiley-Blackwell, Oxford*. ISBN-10: 0470654430. Published August 2012. 202 pages.

Contribution: 18 chapters. Aimed at medical students and neurosurgery/ neurology trainees.

Book chapters (published)

- **Abhinav K**, Fernandez-Miranda JC. Endoscopic endonasal transtuberulum transplanum approach. Endoscopic Approaches to the Paranasal Sinuses and the Skull Base: A Step-By-Step Anatomic Dissection. Edited by: Professor Manuel Bernal-Sprekelsen. *Thieme Publishers*. Publication date: 10 May 2017
- **Abhinav K**, Obikane Y, Fernandez-Miranda JC. Surgical anatomy of the Sellar and Parasellar regions. Gray's Surgical Anatomy. 1st edition. Edited by: Professors Susan Standring, Peter Brennan and Sam Wiseman. *Elsevier*. Publication Date: November 2019
- **Abhinav K**, Obikane Y, Wang WH Fernandez-Miranda JC. Surgical anatomy of the foramen magnum and inferior clivus. Gray's Surgical Anatomy. 1st edition. Edited by: Professors Susan Standring, Peter Brennan and Sam Wiseman. *Elsevier*. Publication Date: November 2019
- Panesar S, **Abhinav K**, Fernandez-Miranda JC. Surgical anatomy of the cerebral hemispheres. Gray's Surgical Anatomy. 1st edition. Edited by: Professors Susan Standring, Peter Brennan and Sam Wiseman. *Elsevier*. Publication Date: November 2019
- **Abhinav K** (*Section co-editor, Neurosurgery section*). Section 3: Applied surgical neuroanatomy. Gray's Surgical Anatomy. 1st edition. Edited by: Professors Susan Standring, Peter Brennan and Sam Wiseman. *Elsevier*. Publication Date: November 2019

Published/ Accepted (Papers)

1. Dzedzic T, **Abhinav K**, Fernandez-Miranda JC. Infratentorial extension of the subtemporal approach: a review and a comparative analysis of different techniques. *Journal of Neurological Surgery Part B: Skull Base* (Accepted November 2021)
2. Cleaver J, Ibitoye R, Morrison H, Flood R, Crewdson K, Marsh A, **Abhinav K**, Bosnell R, Crossley R, Mortimer A. Endovascular treatment for vaccine-induced cerebral venous sinus thrombosis and thrombocytopenia following ChAdOx1 nCoV-19 vaccination: a report of

three cases. *J Neurointerv Surg*. 2021 Nov 15:neurintsurg-2021-018238. doi: 10.1136/neurintsurg-2021-018238. (Online ahead of print)

3. **Abhinav K**, Tyler M, Mohyedin A, Dale O, Fernandez-Miranda JC, Katznelson L. Managing complications of endoscopic transsphenoidal surgery in pituitary adenomas. *Expert Review of Endocrinology and Metabolism* 2020; **1**:1-9.
4. Nielsen TN, **Abhinav K**, Sussman E, Weng Y, Han SS, Steinberg GK. Direct versus indirect bypass procedure for the treatment of ischemic Moyamoya disease: results of an individualized selection strategy. *Journal of Neurosurgery* 2020; 1-12. Doi: 10.3171/2020.3.JNS192847 [online ahead of print]
5. **Abhinav K**, Gimenez P, Tyler M, Patel Z, Fernandez-Miranda JC. Endoscopic endonasal approach for resection of Suprasellar Hemangioblastoma: a two-dimensional operative video. *Operative Neurosurgery* 2020; **20(1)**:E46-E47.
6. Panesar SS, Magnetta M, Mukherjee D, **Abhinav K**, Branstetter BF, Gardner PA, Iv M, Fernandez-Miranda JC. Patient-specific 3-dimensionally printed models for neurosurgical planning and education. *Neurosurgery Focus* 2019; **47(6)**:E12.
7. **Abhinav K**, Hong D, Yan CH, Hwang PH, Fernandez-Miranda JC. Endoscopic endonasal approach for resection of pediatric chordoma with brainstem invasion. *Neurosurgery Focus* 2019
8. **Abhinav K**, Nielsen TH, Singh R, Weng Y, Han SS, Iv M, Steinberg GK. Utility of a quantitative approach using diffusion tensor imaging for prognostication regarding motor and functional outcomes in patients with surgically resected deep intracranial cavernous malformations. *Neurosurgery* 2020;**86(5)**:665-675.
9. **Abhinav K**, Furtado S, Nielsen TN, Iyer A, Gooderham P, Teo M, Lee J, Han SS, Steinberg GK. Functional outcomes after revascularization procedures in patients with Hemorrhagic Moyamoya disease. *Neurosurgery* 2020;**86(2)**:257-265.
10. Nielsen TH, Liu JJ, **Abhinav K**, Han SS, Marks MP, Do HM, Dodd RL, Steinberg GK. Surgical treatment of recurrent previously coiled and/or stent-coiled intracerebral aneurysms: a single-center experience in a series of 75 Patients. *World Neurosurgery* 2019; **124**:649-658.
11. Panesar S, **Abhinav K**, Yeh FC, Jacquesson T, Collins M, Fernandez-Miranda JC. Tractography for surgical neuro-oncology planning: towards a gold standard. *Neurotherapeutics* 2019; **16(1)**:36-51.
12. Yeh FC, Panesar S, Barrios J, Fernandes D, **Abhinav K**, Meola A, Fernandez-Miranda JC. Improved accuracy of diffusion MRI tractography using Topology-Informed Pruning (TIP).

- Neurotherapeutics* 2019; **16(1)**:52-58.
13. **Abhinav K**, Panczykowski D, Wang E, Snyderman C, Gardner P, Fernandez-Miranda JC. Endoscopic endonasal interdural middle fossa approach to the Maxillary nerve: anatomic considerations and surgical relevance. *Operative Neurosurgery* 2017; **13(4)**:522-28.
 14. Fernandez-Miranda JC, Zwagerman N, **Abhinav K**, Cardenas E, Wang E, Snyderman CH, Gardner PA. Cavernous sinus compartments from an endonasal endoscopic approach: anatomical considerations and surgical relevance to adenoma surgery. *Journal of Neurosurgery* 2018; **129(2)**:430-41.
 15. Yoshino M, **Abhinav K**, Yeh FC, Pathak S Gardner PA, Fernandez-Miranda JC. Visualization of cranial nerves using High-definition fiber tractography. *Neurosurgery* 2016; **79(1)**:146-65.
 16. Wang WH, **Abhinav K**, Wang E, Snyderman C, Gardner PA, Fernandez-Miranda JC. Endoscopic endonasal transclival transcondylar approach for foramen magnum meningiomas: surgical anatomy and technical note. *Operative Neurosurgery* 2016; **12(2)**:153-62.
 17. **Abhinav K**, Acosta Y, Bonilla LR, Wang WH, Koutourousiou M, Wang E, Snyderman C, Gardner P, Fernandez-Miranda JC. Endoscopic endonasal approach to the Optic canal: anatomic considerations and surgical relevance. *Neurosurgery* 2015; **11 Suppl 3**:431-46.
 18. **Abhinav K**, Yeh FC, Mansouri A, Zadeh G, Fernandez-Miranda JC. High Definition Fiber Tractography for the evaluation of perilesional white matter tracts in high grade glioma surgery. *Neuro-Oncology* 2015; **17(9)**:1199-209.
 19. Faraji A*, **Abhinav K***, Jarbo K, Yeh FC, Shin SS, Pathak SK, Hirsch B, Schneider W, Fernandez-Miranda JC, Friedlander RM. Longitudinal evaluation of corticospinal tract in patients with resected brainstem cavernous malformations using high definition fiber tractography and diffusion connectometry analysis: preliminary experience. *Journal of Neurosurgery* 2015; **123(5)**:1133-44. (*: equal contributors)
 20. Mukherjee S, **Abhinav K**, Revington P. A review of cervical spine injury associated with maxillofacial trauma at a UK tertiary referral centre. *Annals of The Royal College of Surgeons of England* 2015; **97(1)**:66-72.
 21. **Abhinav K**, Yeh FC, Pathak S, Suski V, Lacomis D, Friedlander RM, Fernandez-Miranda JC. Advanced diffusion MRI fiber tracking in neurosurgical and neurodegenerative disorders and neuroanatomical studies: A review. *BBA: Molecular Basis of Disease* 2014; **1842(11)**:2286-97.
 22. **Abhinav K**, Pathak S, Richardson RM, Engh J, Gardner P, Yeh FC, Friedlander RM,

- Fernandez-Miranda JC. Application of High Definition Fiber Tractography (HDFT) in Management of Supratentorial Cavernous malformations: a combined qualitative and quantitative approach. *Neurosurgery* 2014; **74(6)**:668-81.
23. **Abhinav K**, Yeh FC, El-Dokla A, Ferrando LM, Chang YF, Lacomis D, Friedlander RM, Fernandez-Miranda JC. Use of diffusion spectrum imaging in longitudinal evaluation of amyotrophic lateral sclerosis: development of an imaging biomarker. *Frontiers in Human Neuroscience* 2014; 29(**8**):270.
 24. **Abhinav K**, Prakash S, Sandeman D. Use of robot guided stereotactic placement of intracerebral electrodes for investigation of focal epilepsy: initial experience in the UK. *British Journal of Neurosurgery* 2013; **27(5)**:704-5.
 25. **Abhinav K**, Park ND, Prakash SK, Jones SL, Patel NK. Novel use of narrow paddle electrodes for occipital nerve stimulation – technical note. *Neuromodulation* 2013; **16(6)**:607-9.
 26. **Abhinav K**, Aquilina K, Gbejuade H, La M, Hopkins K, Iyer V. Glioblastoma Multiforme in Elderly Patients: Treatment, O-6-Methylguanine-DNA Methyltransferase (MGMT) Methylation Status and Survival. *Clinical Neurology and Neurosurgery* 2013; **115(8)**:1375-8.
 27. **Abhinav K**, Park N, Patel NK. Trochlear myokymia secondary to cerebellopontine angle arachnoid cyst: a case report. *British Journal of Neurosurgery* 2012; **26(5)**:754-5.
 28. **Abhinav K**, Bradley M, Aquilina K, Patel NK. Spinal arachnoiditis and cyst formation with subarachnoid haemorrhage. *British Journal of Neurosurgery* 2012; **26(4)**:574-5.
 29. **Abhinav K**, Love S, Kalantzis G, Coakham HB, Patel NK. Clinico-pathological review of patients with and without Multiple Sclerosis treated with partial sensory rhizotomy for medically refractory trigeminal neuralgia: a 12 year retrospective study. *Clinical Neurology and Neurosurgery* 2012; **114(4)**:361-5.
 30. Ashgar R, **Abhinav K**. Cranial nerve examination. *International Journal of Clinical Skills*. *International Journal of Clinical Skills* 2011; **5(1)**:56-63.
 31. **Abhinav K**, Marsh L, Crain B, Reich SJ, Biglan K. Co-existence of Parkinson's disease and progressive supranuclear palsy: case report and a review of the literature. *Neurological Sciences* 2011; 32(1):159-63.
 32. Scott KM, **Abhinav K**, Wijesekera L, Ganesalingam J, Goldstein LH, Janssen A, Dougherty A, Willey E, Stanton BR, Turner MR, Ampong MA, Sakel M, Orrell R, Howard R, Shaw CE, Leigh PN, Al-Chalabi A. The association between ALS and population density: A population based study. *Amyotrophic Lateral Sclerosis* 2010; 11(5):435-8.
 33. Manjaly ZR, Scott KM, **Abhinav K**, Wijesekera L, Ganesalingam J, Goldstein LH, Janssen

- A, Dougherty A, Willey E, Stanton BR, Turner MR, Ampong MA, Sakel M, Orrell RW, Howard R, Shaw CE, Leigh PN, Al-Chalabi A. The sex ratio in amyotrophic lateral sclerosis: A population based study. *Amyotrophic Lateral Sclerosis* 2010; 11(5):439-42.
34. Scott KM, **Abhinav K**, Stanton B, Johnston C, Turner MR, Ampong MA, Sakel M, Orrell R, Howard R, Shaw CE, Leigh PN, Al-Chalabi A. Geographical clustering of amyotrophic lateral sclerosis in South-East England: a population study. *Neuroepidemiology* 2009; 32(2):81-88.
35. **Abhinav K**, Shaaban M, Raymond T, Oke T, Gullan R, Montgomery AC. Primary Reconstruction of Pelvic Floor Defects following Sacrectomy using Permacol™ Graft. *European Journal of Surgical Oncology* 2009; 35(4):439-43.
36. **Abhinav K**, Stanton B, Johnston C, Hardstaff J, Orrell RW, Howard R, Clarke J, Sakel M, Ampong M-A, Shaw CE, Leigh PN, Al-Chalabi A. Amyotrophic lateral sclerosis in South-East England: a population-based study. The South-East England register for amyotrophic lateral sclerosis (SEALS Registry). *Neuroepidemiology* 2007; 29(1-2):44-48.
37. **Abhinav K**, Al-Chalabi A, Hortobagyi T, Nigel L. Electrical Injury and amyotrophic lateral sclerosis: a systematic review of the literature. *Journal of Neurology, Neurosurgery and Psychiatry* 2007; **78(5)**:450-453.
38. **Abhinav K**, Bath J, Noble G, Ramirez F. Blurred Vision. *studentBMJ* 2006; **14**:196.

Published (Abstracts)

1. **Abhinav K**, Lee AG, Pendharkar AV, Rosenberg-Hasson Y, Uchino H, Cheng M, Steinberg GK. Multiplex profiling of secreted factors in the cerebrospinal fluid of Moyamoya disease patients. *Neurosurgery* 2019; **66(S1)**.
2. **Abhinav K**, Yan C, Tyler M, Patel Z, Hwang P, Fernandez-Miranda JC. Comparison of intradural, interdural and extradural pituitary transposition techniques for accessing lesions involving the upper clivus, retroinfundibular area, and interpeduncular cistern. *Journal of Neurological Surgery Part B*. 2019; **80(S1)**:S27.
3. **Abhinav K**, Nielsen T, Singh R, Weng Y, Han SS, Iv M, Steinberg GK. Utility of diffusion tensor imaging tractography in evaluating motor examination and functional outcomes in patients with surgically resected deep intracranial cavernous malformations: a preliminary model. *Journal of Neurological Surgery Part B*. 2019; **80(S1)**:S48.
4. Panesar SS, **Abhinav K***, Magnetta M, Mukherjee DR, Gardner P, Fernandez-Miranda JC. Patient-specific three-dimensionally printed models for presurgical planning, training, and

- patient education in skull base surgery. *Journal of Neurological Surgery Part B*. 2019; **80(S1)**:S157.
5. **Abhinav K**, Acosta Y, Bonilla L, Wang WH, Koutourousiou M, Snyderman CH, Gardner PA, Fernandez-Miranda JC. Endoscopic endonasal approach to the optic canal: anatomical considerations and surgical relevance. *Journal of Neurological Surgery Part B*. 2015; **76(S1)**:S102.
 6. Fernandez-Miranda JC, **Abhinav K**, Cardenas E, Wang EW, Snyderman CH, Gardner PA. Cavernous sinus compartments from an endoscopic endonasal approach: proposed anatomical compartments and surgical relevance. *Journal of Neurological Surgery Part B*. 2015; **76(S1)**:S65.
 7. **Abhinav K**, Mortimer A, Bradley M, Renowden S, Nelson RJ. Should endovascular treatment be the first line therapy for ruptured middle cerebral artery (MCA) aneurysms? *British Journal of Neurosurgery* 2013; **27(3)**:272-306.
 8. Mortimer A, **Abhinav K**, Bradley M, Nelson RJ, Renowden SA. Endovascular treatment of MCA aneurysms: clinical and radiological outcomes of a large series. *Neuroradiology* 2012; **54(1)**:S62.
 9. **Abhinav K**, Greenfield K, Sandeman D. A “one-stop” primary care lumbar spine clinic with MRI scanning- report on 2372 patients. *European Spine Journal* 2012; **21(2)**:S255.
 10. Prakash S, **Abhinav K**, Sierazdan K, Sandeman D. Robotic SEEG- The way forward for extratemporal epilepsy evaluation. *British Journal of Neurosurgery* 2012; **26(4)**:591.
 11. **Abhinav K**, Love S, Kalantzis G, Coakham HB, Patel NK. Clinico-pathological review of patients with and without Multiple Sclerosis treated with partial sensory rhizotomy for medically refractory trigeminal neuralgia: a 12 year retrospective study. *British Journal of Neurosurgery* 2011; **25(2)**:178.
 12. **Abhinav K**, Amit A, Revington PJ, Patel NR, Iyer, V. Penetrating orbitocranial injury with wooden foreign body: radiological characteristics and clinical sequelae. *British Journal of Neurosurgery* 2011; **25(2)**:190.
 13. **Abhinav K**, Aquilina K, Gbejuade H, La M, Hopkins K, Iyer V. Glioblastoma Multiforme in Elderly Patients: Treatment, O-6-Methylguanine-DNA Methyltransferase (MGMT) Methylation Status and Survival. *Neuro-Oncology* 2010; **12**:i1 - i12.
 14. **Abhinav K**, Mukherjee S, Revington PJ. Cervical spine injury associated with maxillofacial trauma: a 7-year review. *British Journal of Oral and Maxillofacial Surgery* 2009; **47**:7.
 15. **Abhinav K**, Shaaban M, Raymond T, Oke T, Montgomery A. Primary Reconstruction of Pelvic Floor Defects Following Sacrectomy using Permacol Graft. *Colorectal Disease* 2006;

8 (Suppl. 4):37.

16. Raymond T, **Abhinav K**, Menon G, Kald B, Thakur K. Final histological diagnoses in patients with breast needle core biopsies reported as suspicious of malignancy (B4) or lesions of uncertain malignant potential (B3). *British Journal of Surgery* 2006; **93**(Suppl. 1):13.

Presentations (* denotes presenter)

International

1. **Abhinav K***. Surgical anatomy for endonasal skull base approaches. 2nd Rhoton Society Virtual Meeting and 8th International Zoomposium on Microneurosurgical Anatomy- First Atlantic Session: Contemporary Skull Base Surgery. Department of Neurosurgery, Stanford University School of Medicine, Stanford, USA. 12th September 2020.
2. Anagnostopoulos C, Tyler M, Dale O, Baldwin D, **Abhinav K***, Fernandez-Miranda JC. Technical nuances for pituitary transposition for accessing the retroinfundibular and interpeduncular cistern. Oral presentation at the 9th Annual Conference of Neurological Surgeons' Society of India. Kolkata, India. 28th February 2020.
3. **Abhinav K***, Lee AG, Pendharkar AV, Rosenberg-Hasson Y, Uchino H, Cheng M, Steinberg GK. Multiplex profiling of secreted factors in the cerebrospinal fluid of Moyamoya disease patients. Oral presentation at the Congress of Neurological Surgeons Meeting, San Francisco. 23rd October 2019.
4. **Abhinav K***, Yan C, Tyler M, Patel Z, Hwang P, Fernandez-Miranda JC. Comparison of intradural, interdural and extradural pituitary transposition techniques for accessing lesions involving the upper clivus, retroinfundibular area, and interpeduncular cistern. Oral presentation at the North American Skull Base Society 29th Annual Meeting, Florida. 15th February 2019.
5. **Abhinav K***, Nielsen T, Singh R, Weng Y, Han SS, Iv M, Steinberg GK. Utility of diffusion tensor imaging tractography in evaluating motor examination and functional outcomes in patients with surgically resected deep intracranial cavernous malformations: a preliminary model. Oral presentation at the North American Skull Base Society 29th Annual Meeting, Florida. 15th February 2019.
6. Panesar SS, **Abhinav K***, Magnetta M, Mukherjee DR, Gardner P, Fernandez-Miranda JC. Patient-specific three-dimensionally printed models for presurgical planning, training, and

patient education in skull base surgery. Poster presentation at the North American Skull Base Society Meeting, Florida. 15th February 2019.

7. **Abhinav K***, Furtado S, Nielsen TN, Iyer A, Gooderham P, Teo M, Lee J, Han SS, Steinberg GK. Functional Outcomes after Revascularization Procedures in patients with Hemorrhagic Moyamoya disease. Poster presentation at the AANS Annual Scientific Meeting, New Orleans, Louisiana. April 28- May 2, 2018
8. **Abhinav K**, Furtado S, Nielsen TN*, Iyer A, Gooderham P, Teo M, Lee J, Han SS, Steinberg GK. Functional Outcomes after Revascularization Procedures in patients with Hemorrhagic Moyamoya disease. Poster presentation at the AANS/CNS Joint Cerebrovascular Annual Meeting, Los Angeles, California. January 22-23, 2018.
9. Nielsen TH*, Liu JJ, **Abhinav K**, Han SS, Marks MP, Do HM, Dodd RL, Steinberg GK. Surgical Clipping of Recurrent Previously Coiled and/or Stented Intracerebral Aneurysms: A Single-Center Experience in a Series of 75 Patients. Poster presentation at the AANS/CNS Joint Cerebrovascular Annual Meeting, Los Angeles, California. January 22-23, 2018.
10. Panczykowski D*, **Abhinav K**, Wang E, Snyderman C, Gardner P, Fernandez-Miranda JC. Endoscopic endonasal approach to the Maxillary nerve: anatomical considerations and surgical relevance. Poster presentation at the Congress of Neurological Surgeons Meeting, New Orleans, Louisiana. September 26-30, 2015.
11. **Abhinav K***, Acosta Y, Bonilla LR, Wang WH, Koutourousiou M, Wang E, Snyderman C, Gardner P, Fernandez-Miranda JC. Endoscopic endonasal approach to the optic canal: anatomical considerations and surgical relevance. Poster presentation at the North American Skull Base Society Meeting, Florida. February 20-22, 2015.
12. Fernandez-Miranda JC, **Abhinav K***, Cardenas E, Wang E, Snyderman CH, Gardner PA. Cavernous sinus compartments from an endonasal endoscopic approach: proposed anatomical compartments and surgical relevance. Oral presentation at the North American Skull Base Society Meeting, Florida. February 20-22, 2015.
13. **Abhinav K***, Pathak S, Richardson RM, Engh J, Gardner P, Yeh FC, Friedlander RM, Fernandez-Miranda JC. High Definition Fiber Tractography and Management of Supratentorial Cavernomas: a combined qualitative and quantitative approach. E-poster at 82nd AANS Annual Scientific Meeting, San Francisco. April 5-9, 2014.
14. Mortimer A*, **Abhinav K**, Mews P, Nelson R, Bradley M, Renowden S. Endovascular treatment of MCA Aneurysms: clinical and radiological outcomes of a large series. Oral Presentation at the 36th European Society of Neuroradiology Annual Meeting, Edinburgh. 21 September 2012.

15. **Abhinav K**, Greenfield K, Sandeman D. A “one-stop” primary care lumbar spine clinic with MRI scanning - report on 2372 patients. Poster presentation at the Congress of Neurological Surgeons Meeting, Chicago. 6 – 10 October 2012.
16. **Abhinav K**, Park ND, Prakash S, Patel NK*. Novel use of the ANS S8 lamitrode for occipital neurostimulation: a case series. Poster presentation at the NANS Annual Meeting, Las Vegas. December 8-11, 2011.
17. **Abhinav K***, Love S, Kalantzis G, Coakham HB, Patel NK. Clinico-pathological review of patients with and without Multiple Sclerosis treated with partial sensory rhizotomy for medically refractory trigeminal neuralgia: a 12 year retrospective study. Oral poster (neurosurgical forum for ‘pain’) at the Congress of Neurological Surgeons Annual Meeting, San Francisco. 18 October 2010.
18. **Abhinav K***, Aquilina K, Gbejuade H, La M, Hopkins K, Iyer V. Glioblastoma Multiforme in Elderly Patients: Treatment, O-6-Methylguanine-DNA Methyltransferase (MGMT) Methylation Status and Survival. Poster presentation at the Congress of Neurological Surgeons Annual Meeting, San Francisco. October 2010.
19. Patel NK*, **Abhinav K**, Manola L. Replacing spinal cord stimulation (SCS) therapy delivered using conventional generators with newer technologically advanced devices. Poster Presentation at the 9th World Congress of the International Neuromodulation Society Meeting. Seoul. 11 – 15 September 2009.
20. **Abhinav K**, Stanton B, Johnston C, Hardstaff J, Orrell RW, Howard R, Clarke J, Sakel M*, Among M-A, Shaw CE, Leigh PN, Al-Chalabi A. Amyotrophic Lateral Sclerosis in South-East England: A Population-Based Study [The South-East England Register for Amyotrophic Lateral Sclerosis (SEALS Registry)]. Oral Presentation at the 5th World Congress for Neurorehabilitation. World Federation for Neurorehabilitation. Brasilia, Brazil. 24 - 27 September 2008.
21. **Abhinav K***, Shaaban M, Raymond T, Oke T, Montgomery A. Primary Reconstruction of Pelvic Floor Defects following Sacrectomy using Permacol (registered trademark) Graft. Poster presentation at the European Society of Coloproctology’s First Scientific and Annual General Meeting in Lisbon, Portugal. 14 -16 September 2006.
22. Raymond T, **Abhinav K***, Menon G, Kald B, Thakur K. ‘Final histological diagnoses in patients with breast needle core biopsies reported as suspicious of malignancy (B4) or lesions of uncertain malignant potential (B3)’. Oral Presentation at the Association of Surgeons of Great Britain and Ireland Annual Scientific Meeting, Edinburgh, UK. 3 May 2006.

National (United Kingdom)

1. Gimenez P, Ramcharan W, Harty M, Sinnott J, Fellows G, Edwards R, Bennett W, **Abhinav K***. Expanded endoscopic endonasal transtuberulum transchiasmatic sulcus approach and surgical adjuncts for maximising extent of resection in craniopharyngioma patients: technical nuances and outcomes from a preliminary challenging contemporary series. Oral presentation, British Neuro-endoscopy Society Meeting, the Royal Society of Medicine, London. 19th November 2021.
2. Ramcharan W*, Gimenez P, Sinnott J, Bennett W, **Abhinav K**. Technical nuances for maximizing the sublacerum versus supralacerum expanded endoscopic endonasal transclival approach: implications for resection of chordomas, chondrosarcomas and petroclival meningiomas. Poster presentation, British Neuro-endoscopy Society Meeting, the Royal Society of Medicine, London. 19th November 2021.
3. **Abhinav K***. My time at the Department of Neurosurgery, University of Pittsburgh Medical Center, Pittsburgh, USA. Oral (invited) presentation at the President's Prize meeting (Clinical Neurosciences Section), the Royal Society of Medicine, London. 27 April 2017.
4. **Abhinav K**, Mortimer A*, Mews P, Bradley M, Renowden S, Nelson RJ. Should endovascular therapy be the first line treatment for ruptured middle cerebral artery aneurysms: comparison of endovascular and surgical series? Oral presentation at the Society of British Neurological Surgeons Spring Meeting, Sheffield. 23 May 2013.
5. Prakash S*, **Abhinav K**, Sandeman D. Use of sEEG depth electrodes in extratemporal epilepsy. Oral Presentation at the British Society for Stereotactic and Functional Neurosurgery (BSSFN), King's College Hospital, London. 14-15 June 2012.
6. **Abhinav K***, Greenfield K, Sandeman D. A "one-stop" primary care lumbar spine clinic with MRI scanning - report on 2372 patients. Oral Presentation at the Britspine: combined meeting of the British Scoliosis Society, Society for Back Pain Research and the British Association of Spinal Surgeons, Newcastle. 3 May 2012.
7. **Abhinav K***, Love S, Kalantzis G, Coakham HB, Patel NK. Clinico-pathological review of patients with and without Multiple Sclerosis treated with partial sensory rhizotomy for medically refractory trigeminal neuralgia: a 12 year retrospective study. Oral poster at the Society for British Neurological Surgeons spring meeting, Bristol. 31 March 2011.
8. **Abhinav K***, Amit A, Revington PJ, Patel NR, Iyer, V. Penetrating orbitocranial injury with wooden foreign body: radiological characteristics and clinical sequelae. Poster at the Society for British Neurological Surgeons spring meeting, Bristol. 30 March -1 April 2011.

9. **Abhinav K***. So you want to be a Neurosurgeon? Careers Day. NANSIG and the Society of British Neurological Surgeons Inaugural Meeting. Royal College of Surgeons of England, London. 13 November 2010.
10. **Abhinav K***, Aquilina K, Gbejuade H, La M, Hopkins K, Iyer V. Glioblastoma Multiforme in Elderly Patients: Treatment, O-6-Methylguanine-DNA Methyltransferase (MGMT) Methylation Status and Survival. Poster presentation at the British Neuro-Oncology Society Meeting, University of Glasgow, Glasgow. 23 - 25 June 2010.
11. **Abhinav K***, Mukherji S, Revington PJ. Cervical spine injury associated with maxillofacial trauma: a 7 year review. Oral Presentation at the Scientific Meeting of the British Association of Oral and Maxillofacial Surgeons. Bournemouth. 5 June 2009.
12. **Abhinav K***, Shaaban M, Raymond T, Oke T, Gullan R, Montgomery A. Primary Reconstruction of Pelvic Floor Defects following Sacrectomy using Permacol (registered trademark) Graft. Oral Presentation at the Association of Coloproctology Meeting. Darrent Valley Hospital, Dartford. 27 October 2006.

Selected regional and departmental (United States of America/ United Kingdom)

1. **Abhinav K***, Fernandez-Miranda JC. Endoscopic endonasal resection of pteroclival meningioma. Monthly skull base conference. Department of Neurosurgery, Stanford University School of Medicine, Stanford. 4 February 2019.
2. **Abhinav K***, Steinberg GK. Occipital transtentorial and supracerebellar infratentorial paramedian approach for pineal region. Department of Neurosurgery, Stanford University School of Medicine, Stanford. 4 January 2019.
3. **Abhinav K***. Orbitozygomatic craniotomy and extradural clinoidectomy. Stanford Medtronic Resident Skull Base Course, Stanford University School of Medicine, Stanford. 16 November 2018.
4. **Abhinav K***, Steinberg GK. A series of surgically treated brainstem, thalamic and basal ganglia cavernous malformations. Angioma alliance meeting. San Mateo, California. 2 June 2018.
5. **Abhinav K***, Singh H, Steinberg GK. Subtemporal approach to the lateral basal cisterns. Department of Neurosurgery, Stanford University School of Medicine, Stanford. 23 March 2018.
6. **Abhinav K***, Furtado S, Nielsen TN, Iyer A, Gooderham P, Teo M, Lee J, Han SS, Steinberg GK. Functional Outcomes after Revascularisation Procedures in patients with

Hemorrhagic Moyamoya disease. Stroke Neurology and Neurosurgery Conference. Stanford University School of Medicine, Stanford. 19 March 2018

7. **Abhinav K***, Singh H, Steinberg GK. Pterional approach and anterior clinoidectomy to the paraclinoid region. 23 February 2018.
8. **Abhinav K***, Yeh FC, Pathak S, Friedlander RM, Fernandez-Miranda JC. Characterizing changes in perilesional white matter using High Definition Fiber Tractography. Grand round presentation, Department of Neurological Surgery, University of Pittsburgh Medical Center, Pittsburgh.
9. **Abhinav K***. Developments in glioma Surgery. Oral Presentation at the Patient and Carer Education Day, Samantha Dickson Brain Tumour Trust, Bristol. 3 February 2012.
10. **Abhinav K***, Aquilina K, Iyer V. Elderly Glioma. Oral presentation at the Academic Regional Neuroscience meeting. Frenchay Hospital, Bristol. 2 February 2011.
11. **Abhinav K***, Whone A, Love S, Edwards R. Diagnostic Dilemma. Oral presentation at the Academic Regional Neuroscience meeting. Frenchay Hospital, Bristol. 27 May 2009.
12. **Abhinav K***, Edwards R. Bilateral fixed dilated pupil. Oral presentation at the Academic Regional Neuroscience meeting. Frenchay Hospital, Bristol. 6 May 2009.
13. Ramnarine D*, **Abhinav K***, Patel NK. A pain in the neck. Oral presentation at the Academic regional neuroscience meeting. Frenchay Hospital, Bristol. 25 February 2009.
14. **Abhinav K**, Stanton B, Johnston C, Hardstaff J, Orrell RW, Howard R, Clarke J, Sakel M*, Ampong M-A, Shaw CE, Leigh PN, Al-Chalabi A. Amyotrophic Lateral Sclerosis in South-East England: a population based study [South-East England Register for Amyotrophic Lateral Sclerosis (SEALS) Registry]. Poster Presentation at the East Kent Hospitals Research and Development Meeting. 7 June 2007.
15. **Abhinav K***. 'Elective in USA and India'. Poster presentation at the Student Section, Royal Society of Medicine, London
16. **Abhinav K***, Marsh L, Crain B, Reich SJ, Biglan K. Co-existence of Parkinson's Disease and Progressive Supranuclear Palsy. Oral Presentation at the Clinical General Meeting (Clinical Section), Royal Society of Medicine, London. 18 January 2007. Also an oral presentation at the Academic Regional Neurosciences meeting, Frenchay Hospital, Bristol. 7 May 2008
17. Raymond T, **Abhinav K***, Menon G, Kald B, Thakur K. Final histological diagnoses in patients with breast needle core biopsies reported as suspicious of malignancy (B4) or lesions of uncertain malignant potential (B3). Oral Presentation. South East London Cancer Network (SELCN) Breast Tumour Working Group Study Day, Queen Mary's Hospital,

Sidcup. 21 February 2006.

Completed Audits

1. Auditing the repatriation pathway over a two week period. Department of Neurosurgery, Southmead Hospital, Bristol (2017).
2. A “one-stop” primary care lumbar spine clinic with MRI scanning - report on 2372 patients. Department of Neurosurgery, Frenchay Hospital, Bristol (2011 - 2012).
3. Glioblastoma Multiforme in Elderly Patients: Treatment, O-6-Methylguanine-DNA Methyltransferase (MGMT) Methylation Status and Survival. Department of Neurosurgery. Frenchay Hospital, Bristol (2010 - 2011).
4. Cervical spine fracture and facial injury in trauma patients. Department of Maxillofacial Surgery, Frenchay Hospital, Bristol (2007 – 2008).
5. The use and abuse of preoperative tests for elective surgery in adults. Are the general surgeons following the NICE and local guidelines? Queen Elizabeth Hospital, London. Mortality and Morbidity Data for General Surgical Patients. Queen Elizabeth Hospital, London (2005 – 2006).

Protocols/Guidelines

- **Abhinav K**, Sethi J. Preconceptual Counselling in General Practice. Barnet Primary Care Trust, London. December 2004.

Teaching (Departments of Neurosurgery, Frenchay Hospital and Southmead Hospital Bristol, United Kingdom*; Stanford University School of Medicine, Stanford, USA)

- Didactic 3 dimensional anatomical presentations and cranial operative approaches: hands-on cadaveric training sessions for neurosurgery residents, Stanford University School of Medicine, Stanford
- Neurosurgical topics and basic procedures for junior trainees in neurology and neurosurgery*
- Neurosurgical topics for nurses*
- Neuroanatomy for Neurosurgical and Neurology junior doctors*
- Neurosurgery teaching sessions for final year medical students*

Invited role: faculty and organizer

- 3D Surgical Anatomy of the Cavernous Sinus, Meckel's Cave and Petrous Apex. Rhoton Room: Dueling Dissections- Endonasal v Transcranial. North American Skull Base Society Meeting, Pheonix, Arizona, USA. 19th February 2022.
- International Craniopharyngioma Webinar. North Bristol NHS Trust, Institute of Clinical Neurosciences, Pituitary Foundation, Stryker. Webinar director: K Abhinav. 23rd-24th April 2021.
- 2nd Rhoton Society Virtual Meeting and 8th International Zoomposium on Microneurosurgical Anatomy- Contemporary Skull Base Surgery. Department of Neurosurgery, Stanford University School of Medicine, Stanford, USA. 12th September 2020.
- 9th Annual Conference of Neurological Surgeons' Society of India. Kolkata, India. 27th-29th February 2020.
- Stanford Neurosurgery Skull Base Course: faculty; Department of Neurosurgery, Stanford University School of Medicine, Stanford, USA. 16- 17 November 2018.
- Aberdeen revision course for Fellowship of the Royal College of Surgeons examination in Neurosurgery [FRCS (SN)]: faculty; Aberdeen Royal Infirmary, Aberdeen, United Kingdom. 18 - 19 February 2017.
- Intercollegiate examination for the award of Fellowship of the Royal College of Surgeons examination in Neurosurgery [FRCS (SN)]: co-organiser and contribution of intellectual content; Southmead Hospital, Bristol, United Kingdom. 23 March 2017.

Principal Elective Attachments (including research project)

- Elective in clinical neurology (neurology sub intern) at the Johns Hopkins Hospital, Baltimore, USA (July - September 2004)
 - Research on combined pathological diagnosis of Parkinson's disease and Progressive Supranuclear Palsy (supported by the *Morris K. Udall Parkinson's Disease Research Center of Excellence at Johns Hopkins (NIH P50-NS-58377)* and the *General Clinical Research Center at Johns Hopkins University School of Medicine (National Center for Research Resources/NIH M01-RR00052)*).

- Elective in Obstetrics and Gynaecology, Bihar, India (September - October 2004)

Courses

- Training the trainers Course. The Royal College of Surgeons of England, London, UK. May 2017.
- ISC Leadership and Management Course. London, UK. May 2017.
- Introduction to Good Clinical Practice eLearning. National Institute for Health Research. April 2017
- Critical Appraisal online Course. May 2017
- Principles and practice of Gamma-Knife Radiosurgery Course. University of Pittsburgh Medical Center, Pittsburgh, USA. November 2013. Convenor: L Dade Lunsford, Ajay Niranjana.
- Endoscopic Endonasal Surgery of the Cranial Base and Pituitary Fossa Course. University of Pittsburgh Medical Center, Pittsburgh, USA. March 2013. Convenor: C Snyderman, P Gardner (Observer status)
- Microsurgical Approaches to Intrinsic Brain Tumours. St Louis University School of Medicine. St Louis, Missouri, USA. 6 - 8 May 2010. Convenor: Yasargil, G.
- Operative Skills in Neurosurgery. The Royal College of Surgeons of England. London, UK. 28 – 30 October 2009. Convenor: Malcolm, G.
- Anatomy Course. The Royal College of Surgeons of England. Brighton and Sussex Medical School. University of Sussex. Brighton, UK. July 2008.
- Advanced Trauma Life Support Course (ATLS). Lister Hospital, Stevenage. 17 – 19 October 2007.
- A & E Trauma Radiology Course. Northwick Park Hospital, London. 12 February 2007
- Immediate Life Support Course. King's College Hospital, London. May 2005.
- Advanced Life Support Course. Poole Hospital NHS Trust, Poole. 15 -16 February 2007
- Neuro-Linguistic Programming Course. Guy's, King's and St. Thomas' School of Medicine, London. July 2003.

Professional memberships

- Fellow of the Royal College of Surgeons of England, London, United Kingdom
- American Association of Neurological Surgeons (International candidate member)