

# Stanford

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## Sandip Singh Panesar

Postdoctoral Research Fellow, Neurosurgery

### Bio

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#### PROFESSIONAL EDUCATION

- MD, Royal College of Surgeons in Ireland , Medicine (2010)
- MSc, King's College London , Clinical Neuroscience (2014)

#### STANFORD ADVISORS

- Juan Fernandez-Miranda, Postdoctoral Research Mentor
- Juan Fernandez-Miranda, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **In Reply: Neurosurgery and Manned Spaceflight.** *Neurosurgery*  
Panesar, S. S., Fernandez-Miranda, J. C., Kliot, M., Ashkan, K.  
2019
- **Full tractography for detecting the position of cranial nerves in preoperative planning for skull base surgery: technical note.** *Journal of neurosurgery*  
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- **Artificial Intelligence and the Future of Surgical Robotics.** *Annals of surgery*  
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- **Tractography for Surgical Neuro-Oncology Planning: Towards a Gold Standard.** *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*  
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- **Neurosurgery and Manned Spaceflight.** *Neurosurgery*  
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2018
- **Visualization of Cranial Nerves Using High-Definition Fiber Tractography** *NEUROSURGERY*  
Yoshino, M., Abhinav, K., Yeh, F., Panesar, S., Fernandes, D., Pathak, S., Gardner, P. A., Fernandez-Miranda, J. C.  
2016; 79 (1): 146–65
- **Big Data, Big Impact: The Potential for Data Science in Neurosurgery.** *World neurosurgery*  
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- **Neurosurgery and Manned Spaceflight** *NEUROSURGERY*  
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- **Promises and Perils of Artificial Intelligence in Neurosurgery.** *Neurosurgery*  
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2019
- **In Reply: Neurosurgery and Manned Spaceflight** *NEUROSURGERY*  
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2019; 85 (1): E159–E160
- **Machine Learning Versus Logistic Regression Methods for 2-Year Mortality Prognostication in a Small, Heterogeneous Glioma Database.** *World neurosurgery: X*  
Panesar, S. S., D'Souza, R. N., Yeh, F., Fernandez-Miranda, J. C.  
2019; 2: 100012
- **Patient-specific 3-dimensionally printed models for neurosurgical planning and education.** *Neurosurgical focus*  
Panesar, S. S., Magnetta, M., Mukherjee, D., Abhinav, K., Branstetter, B. F., Gardner, P. A., Iv, M., Fernandez-Miranda, J. C.  
2019; 47 (6): E12
- **Commentary: The Nomenclature of Human White Matter Association Pathways: Proposal for a Systematic Taxonomic Anatomical Classification.** *Frontiers in neuroanatomy*  
Panesar, S. S., Fernandez-Miranda, J.  
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- **Structure, asymmetry, and connectivity of the human temporo-parietal aslant and vertical occipital fasciculi.** *Brain structure & function*  
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- **Automatic Removal of False Connections in Diffusion MRI Tractography Using Topology-Informed Pruning (TIP).** *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*  
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2018
- **A Quantitative Tractography Study Into the Connectivity, Segmentation and Laterality of the Human Inferior Longitudinal Fasciculus** *FRONTIERS IN NEUROANATOMY*  
Panesar, S. S., Yeh, F., Jacquesson, T., Hula, W., Fernandez-Miranda, J. C.  
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- **Population-averaged atlas of the macroscale human structural connectome and its network topology.** *NeuroImage*  
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2018; 178: 57–68
- **Feasibility of Clinician-Facilitated Three-Dimensional Printing of Synthetic Cranioplasty Flaps** *WORLD NEUROSURGERY*  
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- **Surgery in space.** *The British journal of surgery*  
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- **A diffusion spectrum imaging-based tractographic study into the anatomical subdivision and cortical connectivity of the ventral external capsule: uncinata and inferior fronto-occipital fascicles** *NEURORADIOLOGY*  
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- **Surgical Management of Vertex Epidural Hematoma: Technical Case Report and Literature Review** *WORLD NEUROSURGERY*  
Fernandes-Cabral, D. T., Kooshkabadi, A., Panesar, S. S., Celtikci, E., Borghei-Razavi, H., Celtikci, P., Fernandez-Miranda, J. C.  
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- **High-Definition Fiber Tractography in the Evaluation and Surgical Planning of Lhermitte-Duclos Disease: A Case Report** *WORLD NEUROSURGERY*  
Fernandes-Cabral, D. T., Zenonos, G. A., Hamilton, R. L., Panesar, S. S., Fernandez-Miranda, J. C.  
2016; 92: 587.e9–587.e13
  
- **Multidisciplinary Team Management of Cerebral Metastases: Recent Trends and Future Implications** *CLINICAL ONCOLOGY*  
Panesar, S., Tailor, J., Bhangoo, R., Ashkan, K.  
2016; 28 (5): 343–44