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CLINICAL FOCUS

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ACADEMIC APPOINTMENTS

- Clinical Instructor, Neurosurgery

PROFESSIONAL EDUCATION

- Intercalated BSc, Kings College London , Neuropharmacology (1997)
- Medical degree (MBBS), Kings College School of Medicine and Dentistry, London, UK , Medicine (2000)
- Residency, University College London Hospitals / National Hospital Neurosurgery Residency , Neurosurgery (2015)
- PhD, University College London , Cognitive Neuroscience and Neuroimaging (2016)

PATENTS

- Wong, Steven; Ekanayake, Jinendra; Constandinou, Timothy. "United States Patent GB2632018A (pending) Apparatus and method for intraoperative real-time tumour tissue discrimination", Imperial College London, Jan 22, 2025
- Steven Wong, Timonthy Constandinou, Jinendra Ekanayake. "United States Patent US20230404423A1 (pending) Apparatus and method for intraoperative real-time tumour tissue discrimination", Imperial College London, Dec 21, 2023
- Mathew Cavuto, Timothy Constandinou, Jinendra Ekanayake. "United States Patent US20230277192A1 (pending) Actuator handle for surgical tools", Imperial College London, Sep 7, 2023

Publications

PUBLICATIONS

- **Towards Improved Outcomes for Cavernous Malformations of the Brainstem and Other "Critical" Function Brain Regions.** *Neurosurgery*
  Ekanayake, J., Luo, I., Steinberg, G. K.
  2026

- **Wide-field and non-invasive imaging of brain tumours with scattered light techniques.** *Biomedical optics express*

Binner, P., Radford, J., Starshynov, I., Madhusudan, M., Strathdee, K., Stevenson, K., Walker, M., Ciccone, G., Tejeda, G., Tobin, A. B., Vassalli, M., Chalmers, A. J., Ekanayake, et al
2026; 17 (3): 1112-1124

- **Achieving better outcomes in treatment of vascular malformations in brainstem and other 'critically' eloquent brain regions - a novel surgical paradigm**
  Ekanayake, J., Luo, I., Steinberg, G.
  LIPPINCOTT WILLIAMS & WILKINS.2026

- **Towards Markerless Intraoperative Tracking of Deformable Spine Tissue**
  Daly, C., Marconi, E., Riva, M., Ekanayake, J., Elson, D. S., Baena, F.
  edited by Gee, J. C., Alexander, D. C., Hong, J., Iglesias, J. E., Sudre, C. H., Venkataraman, A., Golland, P., Kim, J. H., Park, J.
  SPRINGER INTERNATIONAL PUBLISHING AG.2026: 627-637

- **Letter: Neurosurgical Endovascular Credentialing in Europe and the United Kingdom for the "Complete" Neurovascular Surgeon: The Time has Come.** *Neurosurgery*
  Stuart, M. J., Ekanayake, J., Sreenivasan, S., Steinberg, G. K.
  2025

- **Imaging timing after surgery for glioblastoma: an evaluation of practice in Great Britain and Ireland (INTERVAL-GB)- a multi-centre, cohort study.** *Journal of neuro-oncology*
  2024; 169 (3): 517-529

- **Definition of Implanted Neurological Device Abandonment** *JAMA NETWORK OPEN*
  Okun, M. S., Marjenin, T., Ekanayake, J., Gilbert, F., Doherty, S. P., Pilkington, J., French, J., Kubu, C., Lazaro-Munoz, G., Denison, T., Giordano, J.
  2024; 7 (4): e248654

- **Building Healthcare Applications with LiDAR - Real-time Tissue Identification for Surgery** *IEEE Healthcare Innovations and Point of Care Technologies (HI-POCT)*
  Le Renard, N., Wong, S. S., Giannarou, S., Faccio, D., Constandinou, T., Ekanayake, J.
  2024: 1-4

- **Morphometric differences between basal cell carcinomas & melanomas of the head & neck versus other sites and their influence on neural networks** *EJC Skin Cancer*
  Jonas, H., Ekanayake, J., Dehmesjki, J., Dhanda, J.
  2024

- **Towards Intraoperative Tissue Characterisation with Industrial Precision LiDAR** *IEEE-EMBS International Conference on Biomedical and Health Informatics*
  LeRenard, N., Wong, S. S., Giannarou, S., Faccio, D., Constandinou, T. G., Ekanayake, J.
  2024

- **Towards Real-time Multiplexed Bioimpedance Tumour-Tissue Margin Analysis**
  Wong, S. S., Malik, A., Ekanayake, J., Constandinou, T. G., IEEE
  IEEE.2023: 1-5

- **Patent: Apparatus and method for intraoperative real-time tumour tissue discrimination**
  Ekanayake, J., Wong, S., Constandinou, T.
  US Patent Office. USA.
  2023 ; US20230404423A1

- **Patent: Actuator handle for surgical tools**
  Ekanayake, J., Constandinou, T., Cavuto, M.
  US patent office. USA.
  2023 ; US20230277192A1

- **Multielectrode Multiplexing for Bioimpedance Surface Topography Mapping**
  Wong, S. S., Radford, J., Faccio, D., Constandinou, T. G., Ekanayake, J., IEEE
  IEEE.2023

- **Multimodal Approaches for Real-time Mesoscopic Tissue Differentiation**
  Wong, S. S., Radford, J., Binner, P., Gradauskas, V., Constandinou, T. G., Ekanayake, J., Faccio, D., IEEE
  IEEE.2023

- **Volitional Control of Brain Motor Activity and Its Therapeutic Potential** *NEUROMODULATION*
  Girges, C., Vijiaratnam, N., Zrinzo, L., Ekanayake, J., Foltynie, T.
  2022; 25 (8): 1187-1196

- **Imaging timing after glioblastoma surgery (INTERVAL-GB): protocol for a UK and Ireland, multicentre retrospective cohort study.** *BMJ open*
  Gillespie, C. S., Bligh, E. R., Poon, M. T., Solomou, G., Islim, A. I., Mustafa, M. A., Rominiyi, O., Williams, S. T., Kalra, N., Mathew, R. K., Booth, T. C., Thompson, G., Brennan, et al
  2022; 12 (9): e063043

- **Olfactory outcomes after transsphenoidal endonasal surgery** *BRITISH JOURNAL OF NEUROSURGERY*
  Baudracco, I., Ekanayake, J., Warner, E., Grieve, J. P., Dorward, N. L.
  2020; 34 (1): 35-39

- **Volitional modulation of higher-order visual cortex alters human perception** *NEUROIMAGE*
  Ekanayake, J., Ridgway, G. R., Winston, J. S., Feredoes, E., Razi, A., Koush, Y., Scharnowski, F., Weiskopf, N., Rees, G.
  2019; 188: 291-301

- **Towards a Distributed, Chronically-Implantable Neural Interface**
  Ahmadi, N., Cavuto, M. L., Feng, P., Leene, L. B., Maslik, M., Mazza, F., Savolainen, O., Szostak, K. M., Bouganis, C., Ekanayake, J., Jackson, A., Constandinou, T. G., IEEE
  IEEE.2019: 719-724

- **Hemodynamic Matrix Factorization for Functional Magnetic Resonance Imaging** *Connectomics in NeuroImaging. CNI 2019*
  Hutel, M., Antonelli, M., Ekanayake, J., Ourselin, S., Melbourne, A.
  2019

- **Learning joint lesion and tissue segmentation from task-specific hetero-modal datasets** *Proceedings of The 2nd International Conference on Medical Imaging with Deep Learning*
  Dorent, R., Li, W., Ekanayake, J., Ourselin, S., Vercauteren, T.
  2019

- **An impedance probing system for real-time intraoperative brain tumour tissue discrimination**
  Wong, S. S., Ekanayake, J., Liu, Y., Constandinou, T. G., IEEE
  IEEE.2019

- **Real-time decoding of covert attention in higher-order visual areas** *NEUROIMAGE*
  Ekanayake, J., Hutton, C., Ridgway, G., Scharnowski, F., Weiskopf, N., Rees, G.
  2018; 169: 462-472

- **The conversational position in endoscopic pituitary surgery** *BRITISH JOURNAL OF NEUROSURGERY*
  Ekanayake, J., Baudracco, I., Quereshi, A., Vercauteren, T., Dorward, N. L.
  2018; 32 (1): 44-46

- **Generalised Wasserstein Dice Score for Imbalanced Multi-class Segmentation Using Holistic Convolutional Networks**
  Fidon, L., Li, W., Garcia-Peraza-Herrera, L. C., Ekanayake, J., Kitchen, N., Ourselin, S., Vercauteren, T.
  edited by Crimi, A., Bakas, S., Kuijf, H., Menze, B., Reyes, M.
  SPRINGER INTERNATIONAL PUBLISHING AG.2018: 64-76

- **Scalable Multimodal Convolutional Networks for Brain Tumour Segmentation** *Medical Image Computing and Computer Assisted Intervention − MICCAI 2017*
  Lucas, F., Wenqi, L., Garcia-Peraza-Herrera,, L., Ekanayake, J., Kitchen, N., Ourselin, S., Vercuateren, T.
  2017

- **Preoperative Particle and Glue Embolization of Meningiomas: Indications, Results, and Lessons Learned from 117 Consecutive Patients** *NEUROSURGERY*
  Borg, A., Ekanayake, J., Mair, R., Smedley, T., Brew, S., Kitchen, N., Samandouras, G., Robertson, F.

2013; 73: 244-251

- **Use of the novel ANSPACH bone collector for bone autograft in anterior cervical discectomy and cage fusion** *ACTA NEUROCHIRURGICA*
  Ekanayake, J., Shad, A.
  2010; 152 (4): 651-653

- **Lateralizing and localizing values of ictal onset recorded on the scalp:: Evidence from simultaneous recordings with intracranial foramen ovale electrodes** *EPILEPSIA*
  Alarcón, G., Kissani, N., Dad, M., Elwes, R. D., Ekanayake, J., Hennessy, M. J., Koutroumanidis, M., Binnie, C. D., Polkey, C. E.
  2001; 42 (11): 1426-1437