

BRACCO FELLOWSHIPS EDUCATION IN RESEARCH ENROLMENT FORM

Name of InstitutionKin	ng's College London, Guy's & St Thomas' Hospitals_
City and Country of Inst	itution_London, United Kingdom
RESEARCH GROUP	

Brief description of the research group and of its mission:

<u>Department of Cancer Imaging, School of Biomedical Engineering & Imaging Sciences, St Thomas' Hospital, London:</u>

Our innovative research programme is dedicated to improving cancer care through imaging technology. We currently host 10 PhD/MD(Res) students and 3 NIHR integrated academic training fellows in Radiology. We work with national and international collaborators and industry partners to personalize patient care across a number of themes including:

- Biomarker development
- Disease phenotyping and response prediction, evaluation and prognosis
- Development and optimisation of hybrid imaging
- Image analysis, radiomics and artificial intelligence

We also support a portfolio of multicentre clinical trials with imaging facilities including 8 CTs (4 Dual Source), 15 MRIs (0.55T, 1.5T, 3T, 7T) 2 SPECT/CT, 3 PET/CTs and 1 PET/MRI. The School of Biomedical Engineering hosts the London Medical Imaging AI Centre.

Webpage: www.kcl.ac.uk/bmeis

TITLE OF PROPOSED RESEARCH PROJECT

Improving understanding tumour heterogeneity in renal cell cancer

OBJECTIVES

• To investigate the factors contributing to renal tumour heterogeneity on imaging

APPLICANT'S DUTIES

- To assist in CT & MR imaging data interpretation and analysis
- To analyse heterogeneity in relation to immunotherapy/antiangiogenic therapies & clinicopathological factors

APPLICANT'S BENEFITS

- o Experience of working with imaging data including large scale clinical trial data
- Experience of research techniques including systematic review, data curation & annotation, data analysis, statistical & AI techniques
- o Experience of research presentation e.g. abstract writing & submission
- Participation on scientific outcomes of the project i.e. presentations to congresses or publications of papers

• Project Leader: Vicky Goh

• Project Members: Davide Prezzi, Aishah Azam