

BRACCO FELLOWSHIPS EDUCATION IN RESEARCH ENROLMENT FORM

Name of Institution ___King's College London and Guy's & St Thomas Hospitals

City and Country of Institution ___London, UK _____

RESEARCH GROUP

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

Our innovative research is dedicated to improving cancer care through imaging technology. We currently host 18 PhD/MD(Res) students and 4 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), 13 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

AI for prostate cancer detection

OBJECTIVES

- To assess the performance of AI algorithms in detecting clinically significant prostate cancer

APPLICANT'S DUTIES

- To assist in MRI data curation
- To analyse and compare the performance of in house and commercial AI algorithms for detecting prostate lesions
- To experience being embedded in the London Medical Imaging & AI Centre algorithm development teams

APPLICANT'S BENEFITS

- Experience of process of AI development & clinical evaluation

- Experience of research techniques including systematic review, data curation & annotation, data analysis, statistical techniques
 - 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
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- Project Leader: Vicky Goh
 - Project Members: Davide Prezzi, Aishah Azam, Michela Antonelli, Marc Modat, Christopher Rookyard, Rob O'Shea