

# **BRACCO FELLOWSHIPS EDUCATION IN RESEARCH ENROLMENT FORM**

**Name of Institution:** Imperial College London

**City and Country of Institution:** London, United Kingdom

## **RESEARCH GROUP**

Our research group is comprised of academic radiologists, data scientists, and biologists who work in the field of image analysis. One of our strengths is discovery and translation of radiomic vectors in prognostication. We have strength in genito-urinary imaging and analysis. Our mission is to develop ML/AI tools that provide value to clinical decision-making.

## **TITLE OF PROPOSED RESEARCH PROJECT**

**Discovery and validation of radiomic prognostic vector in adnexal masses on MRI with correlation to CT.**

## **OBJECTIVES**

- To segment adnexal masses from the MROC study (CT and MRI) for radiomics analysis, together with local team.
- To work with computing team to test prior radiomic models on CT and develop new models on both CT and MR.
- To evaluate a pre-existing fully-automated pipeline against manual radiomics outputs.

## **APPLICANT'S DUTIES**

- Become familiar with handling image data on XNAT research PACS, using data analysis tools and segmentation tools
- Work with the computing science team to work on the radiomics modelling, using a large database of clinical information and patient outcomes.
- To work with the team on writing up the results for presentation and publication

## **APPLICANT'S BENEFITS**

- Participation on scientific presentations to congresses
  - Participation as author on scientific publications
  - Opportunity to learn skills related to radiomic image analysis
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- Project Leader: Prof Andrea Rockall
  - Members: Prof Christina Fotopoulou, Dr Selina Chiu, Dr Paula Cunea, Dr Nishat Bharwani, Prof Eric Aboagye, Dr Kristofer Linton-Reid, Dr Cathy Qin