





MONAHAN Kevin EOI 2022 - Imperial

Project title: Management of cancer risk in people with Lynch Syndrome and a Family History of Colorectal Cancer (CRC)

Project Summary:

Background: Lynch syndrome (LS) is associated with up to 70% lifetime CRC risk, and affects about 500,000 people in the UK. However only about 5% of people with this condition are known in the UK, and there exists wide variation in clinical care. The benefit of colonoscopy in the prevention of CRC in LS does not replicate the outcomes of colonoscopy in other populations, possibly because some CRCs in LS arise submucosally, and therefore may be difficult to detect endoscopically, but also because of variable quality colonoscopy. We also need to consider alternative strategies to colonoscopy for CRC prevention, such as identification of molecular markers of risk in people with LS who have otherwise normal appearing colons.

Proposed project: We have charitable funding for 3 projects relating to CRC prevention in LS

- 1) Establishment of a national LS registry
- 2) Use of FIT to personalise colonoscopic surveillance in people with LS
- 3) Molecular biomarkers taken from neoplastic and non-neoplastic tissue from patients undergoing colonoscopic surveillance

These projects are already underway working with collaborators at Imperial, Kings and QMUL. The candidate would be involved in all three, but could focus on one project depending on their personal goals.

Resources required: An interest in basic science, personal drive but most important, interest in cancer prevention.

Time required/likely output: EG 2-3 year MD/PhD; Experience in clinical trials; possible publication. Would be suitable for an MD or PhD depending on the candidates aspirations i.e. 2-3 years.

Other funding details: (EG needed or already in place) Funding from 40tude charity for project resources.

Supervisory Team:

- Dr Kevin Monahan, Lynch Syndrome Clinic, St Mark's Hospital
- Prof Huw Thomas, Imperial College London
- Dr Andy Latchford, St Mark's Hospital

Clinical Specialities: Medical, surgery, oncology, pathology