

# Dr Trevor Graham



## Research Interests

I research the clonal evolution of cancer. My lab has expertise in molecular biology, genetics, bioinformatics and the mathematical and computational modelling of cancer.

Particular research interests of my group are:

- Developing measures of tumour evolution that are useful as prognostic biomarkers.
- Measuring the pattern and pace of clonal evolution in human malignancies.
- Carcinogenesis in inflammatory bowel disease.
- Understanding the histological mechanisms of clonal expansion in the human body.
- Mathematical modelling of cancer growth.

I am an Early Career Researcher at the Barts Cancer Institute.

## Major Funders

- Cancer Research UK via the Barts Cancer Institute.
- Prof Derek Willoughby fund for Inflammatory Research
- Bowel and Cancer Research charity

## Contact Details

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## Recent Publications

1. Lineage tracing reveals multipotent stem cells maintain human adenomas and the pattern of clonal expansion in tumor evolution.

Humphries A, Cereser B, Gay L, Miller D, Das B, Gutteridge A, Elia G, Nye E, Jeffery R, Poulson R, Novelli M, Rodriguez-Justo M, McDonald SAC, Wright NA, **GRAHAM TA**  
PNAS, 2013 Jul 2;110(27):E2490-9.

2. Modelling the evolution of genetic instability during tumour progression.

Datta R, Gutteridge A, Swanton C, Maley CC, **GRAHAM TA**  
Evolutionary Applications, January 2013, 6(1) 20-33

3. Field cancerisation in the intestinal epithelium of patients with Crohn's ileocolitis.

Galandiuk S, Rodriguez-Justo M, Jeffery R, Nicholson AM, Cheng Y, Oukrif D, Elia G, Leedham S, McDonald SAC, Wright NA, **GRAHAM TA**  
Gastroenterology, April 2012, 142(4) 855-64

4. Cell migration leads to spatially distinct but clonally related airway cancer precursors

Pipinikas CP, Kiropoulos TS, Teixeira VH, Brown JM, Varanou A, Falzon M, Capitanio A, Bottoms SE, Carroll B, Navani N, McCaughan F, George JP, Giangreco A, Wright NA, McDonald SAC, **GRAHAM TA**, Janes SM  
Thorax, 2014, Jun;69(6):548-57