Medical Research Council (MRC): Evaluation of Early Careers Programme

Anqi Pan | BSocSc (Hons) Politics and International Relations

INTRODUCTION

The MRC is one of seven Research Councils which are part of UK Research and Innovation. It aims to fund innovative scientists, high-impact and internationally competitive research in the field of health care. Research funded by the MRC has produced 32 Nobel Prize winners to date.
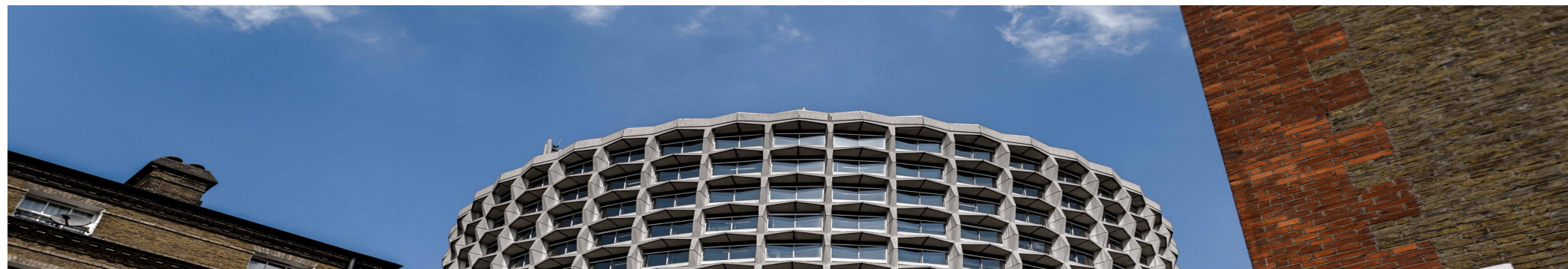

Figure 1: MRC Headquarter in London

OBJECTIVES

My objective at the MRC was to assist Evaluation, Analysis and Information team to evaluate the benefits that the MRC programme has brought to successful ECRs (Early Career Research) and the obstacles that they faced in achieving success, such as gender, ethnicity, the number of publications, the place of the institution and the type of scheme. Besides, the evaluation also includes a comparison between successful and unsuccessful candidates in terms of career pathways and academic results.

Figure 2: Type of grants included in the analysis

METHODS

The main research question of MRC's project is "What difference does MRC support for ECRs make to their research career trajectory and why?". The project is managed by Dr Charitini Stavropoulou who adopts a mixed-method approach for the analysis. However, my duty was to analyse the quantitative data provided by Dimensions and the MRC. I mainly used three programmes to conduct the research:

- **EXCEL**: data management, visualisation and cleaning; creation of tables and graphs; pivot table; functions; VBA coding.

- **STATA**: data management, visualisation, creation, cleaning and merging; running statistical tests of correlations; making graphs, box plots, cross tabs and complex bar charts; creating a Do-File to record all procedures for future verification.

- **PYTHON**: web scraping to complete the information of candidates (example: current country and institution).

RESULTS AND KEY SKILLS

Due to confidentiality reasons, I am not able to show any figure and the results of my analysis to a third party without agreement. During my internship at the MRC, I acquired a very good knowledge of STATA and Excel for data management and analysis by creating tables, box plots, pies and bar charts. Besides, I also learnt advanced statistical knowledge on linear and logistic regressions, Chi2 test, t-test, and Mann-Whitney test to evaluate the statistical significance of correlations. Finally, if there is a piece of paper being published in the future, I will be one of the authors.