

1 RESEARCH ASSISTANT POSITION TO STUDY CANCER GENOMIC EVOLUTION https://itn-contra.org

Application closing date: 15th July 2019.

Host Institution: King's College London and The Francis Crick Institute

Cancer is a major cause of death and constitutes a heterogeneous group of diseases characterised by abnormal cell growth, stage-wise progression and potential to develop resistance to therapies. All these aspects are consequences of the evolutionary nature of cancer. Fortunately, genomics has recently begun to provide opportunities for unprecedentedly detailed insights into tumour evolution. New techniques are presently emerging for assaying the spatial distribution of tumour heterogeneity, and future yet unforeseen experimental breakthroughs are inevitable.

CONTRA (Computational ONcology TRaining Alliance, <u>https://itn-contra.org/</u>) is a EU H2020 Marie-Sklodowska-Curie Innovative Training) aimed at providing a structured training programme to Early Stage Researchers (ESRs) to study tumour evolution using computational tools and novel experimental approaches including, but not limited to, single-cell genomics. The training structure of CONTRA includes local and network-wide activities and secondments to other labs of the network (see partner labs below).

ABOUT THE PROJECT

The post offered here is to work in Francesca Ciccarelli's lab at the Francis Crick Institute in London on the **Identification and impact of clonal and subclonal driver alterations on cancer progression**. The aim of this project is to predict clonal and subclonal driver alterations starting from cancer genomic data of individual cancer patients using artificial intelligence. Among the expected results, we aim to 1) develop new methods to predict clonal and subclonal drivers; 2) refine methods for comparing models of cancer progression; 3) predict model of cancer prognosis based on clonal and subclonal alterations.

ABOUT THE HOST LAB

The Ciccarelli Lab is part of the School of Cancer & Pharmaceutical Sciences of King's College London and is located at The Francis Crick Institute in London. The research of the group focuses on cancer genomics using systems biology approaches.

DURATION OF THE CONTRACT AND ELIGIBILITY CRITERIA

The post is offered for a duration of maximum 27 months. At the time of recruitment, the applicant must not have resided or carried out their main activity in United Kingdom for more than 12 months in the three years immediately prior to his/her recruitment. The applicant should also be in the first four years of their research careers at the time of recruitment and have not been awarded a doctoral degree. The successful candidate will receive a very generous financial package (see link below).

APPLICATION PROCESS

Candidates may apply for the positions through King's College London application system.

Top-level graduates (master degree or equivalent) in bioinformatics, statistics, mathematics, computer science or evolutionary biology are encouraged to apply. No discrimination will be made on the basis of nationality, gender, race, religion or disability. The project supervisor will revise the candidates' documentation and, on the basis of the completeness and adequacy of the requested material and eligibility, will score candidates based on: (1) academic profile; (2) personal motivation; (3) scientific skills and relevant experience; and (4) English proficiency. Shortlisted candidates will be invited to teleconference interviews with the project supervisor and ad hoc panel interview.

Application deadline: 15th July 2019. Candidates are invited to contact Professor Francesca Ciccarelli (<u>francesca.ciccarelli@crick.ac.uk</u>).

CONTRA partner Institutions:

