

Guidelines for accessing the Cancer Research Horizons- AstraZeneca Functional Genomics Centre

Context

The Cancer Research Horizons–AstraZeneca Functional Genomics Centre (FGC) is a centre of excellence in genetic screening, cancer modelling and big data processing aimed at accelerating the discovery of new cancer medicines.

Our mission is to enable the identification of novel therapeutic targets and mechanisms of drug sensitivity and resistance to facilitate the creation of new cancer medicines and the improved use of existing cancer medicines.

While we work with AstraZeneca (AZ) to share resources and expertise within the centre, projects run by Cancer Research Horizons and arising data associated to these projects are kept separate from those brought into the FGC by AZ. Your projects and arising data will remain protected by confidentiality and AZ will not have any access or rights to data or IP arising from your project.

CRUK-funded researchers that wish to use CRISPR technology within their research project may approach the FGC to discuss potential projects and associated costs. The technologies and capabilities available within the FGC will evolve over time and as such, it is best to get in touch with us directly to discuss your ideas.

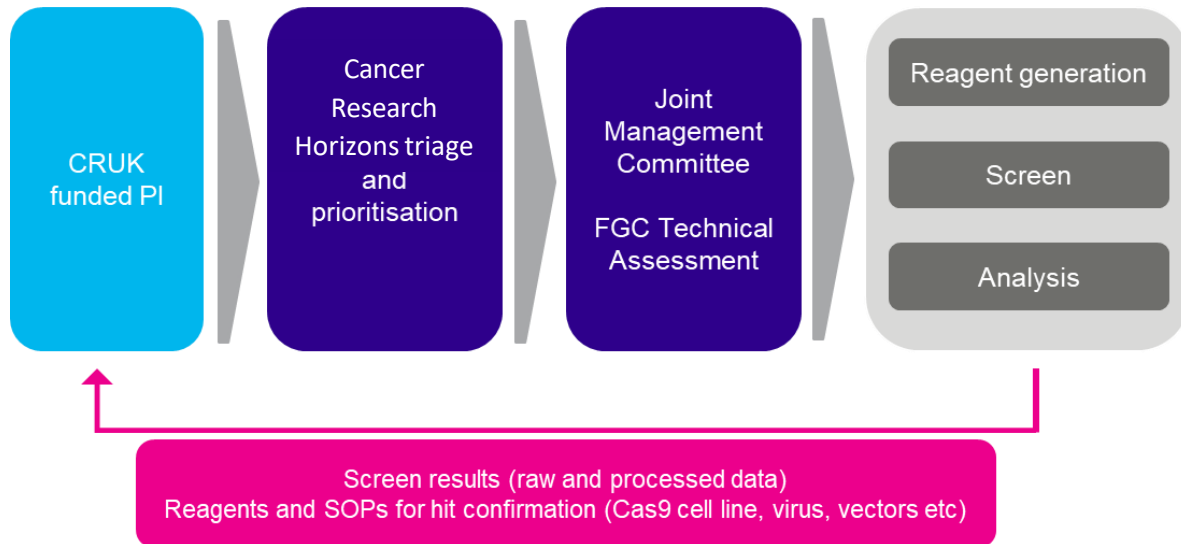
Eligibility

To access the screening capabilities on offer within the Functional Genomics Centre, you should be one of:

- A researcher based at a CRUK Institute or associated to a CRUK Centre
- A CRUK grant holder

If you are unsure of your eligibility, please contact our FGC-dedicated representative, Beatrice Lana at Beatrice.Lana@cancer.org.uk

Process



1. Project Development

Eligible PIs and the Cancer Research Horizons scientific team at the FGC will work together to develop a project proposal for consideration.

2. Prioritisation by the Horizons' Triage Panel

Screening capacity at the FGC is shared equally between Horizons and AstraZeneca. As such, Cancer Research Horizons' screening capacity is limited and the Cancer Research Horizons' Triage Panel will have the responsibility of prioritising projects to bring into the FGC on behalf of Cancer Research Horizons. Projects will be prioritised based on Cancer Research Horizons strategic priority, feasibility and deliverability. Consideration of the strength of screen validation data will be important for success. The terms of reference and scoring criteria for this Panel can be found in Appendix 1 and 2.

The Cancer Research Horizons' Triage Panel will meet every two to three months.

3. Assessment at the Joint Management Committee

The Joint Management Committee is responsible for overseeing the overall management of the FGC. It comprises members from both Horizons and AstraZeneca. Your project will be reviewed for technical feasibility by the JMC alongside all projects entering the FGC. If needed, sensitive information can be redacted at this stage.

The Joint Management Committee will meet every two to three months.

4. Project enters FGC

Successful projects will enter the FGC. Data and results arising from the project are not shared between AstraZeneca and Cancer Research Horizons at any point unless the PI wishes to collaborate with AZ. The decision to collaborate with AZ is at the discretion of the PI and Cancer Research Horizons.

Costs

Cancer Research UK researchers can access the technologies and capabilities within the FGC at a rate that is subsidised by Cancer Research UK. Exact costs will vary depending on the complexity of the experimental setup, but as an indication, projects entering the FGC will start at £4,000 (not including VAT) per genome wide CRISPR knock-out screen in an established cancer cell line with standard characteristics (i.e. normal growth rates, media and serum requirements.) This cost will include:

- One genome wide screen in an established cancer cell line, one assay condition
- Two technical replicates
- Next Generation Sequencing
- Standard bioinformatic analysis

Costs for screens run at FGC can be requested on response-mode CRUK grant applications. If not- prioritised for FGC-access, relevant project activity will need to be conducted through other means and no additional funds can be requested. Contingency plans, in the event that FGC-access is not secured, should be outlined within the grant application.

Contact us

Our team can support you at each stage of the project development and submission process to give you the highest chance of success. Please get in touch with our dedicated FGC representative, Beatrice Lana at

Beatrice.Lana@cancer.org.uk

Appendix 1 – The CRUK Triage Panel Terms of Reference

Introduction

The AstraZeneca–Cancer Research UK Functional Genomics Centre (**FGC**) is a world-leading jointly- funded centre of expertise in genetic screens, cancer models, CRISPR vector design and computational approaches to big data, with the aim to identify novel targets and resistance mechanisms to create new cancer medicines.

The FGC will run an equal balance of AZ and CRUK projects. CRUK projects may come from multiple sources including CRUK funded Principal Investigators (PIs) and CRH Therapeutic Innovation labs.

Purpose and Remit

Before entering the FGC, all projects, whether originating from AZ or CRUK, are reviewed by the FGC Joint Management Committee (**JMC**). The CRUK Triage Panel (**the Panel**) shall have sight of all projects submitted to CRUK and shall be responsible for reviewing and prioritising these on behalf of CRUK prior to the projects being taken to the JMC.

The Panel shall:

- **Review and prioritise** projects brought to the Panel by potential users based on strategic importance, technical feasibility and deliverability (i.e. whether the PI shall be able to conduct the necessary work either side of the screen)
- **Ensure a balance** of projects across users (i.e. between academic and commercial access)

Membership

- The Panel shall consist of members from across the CRUK research network with good understanding of CRUK research strategy and priorities
- The Panel shall include at least one TI scientist (CRH) representative
- Members of the Panel shall be appointed for an initial term of one year, which shall be renewable if agreed between CRUK and the member

Meeting structure and typical functioning

- It is anticipated that meetings will not exceed 2 hours in length and should aim to be held every two months, although no less than quarterly. Meetings can be conducted by teleconference if needed.
- Project proposals for consideration shall be shared with the Panel at least 2 weeks in advance of the meeting.
- A quorum for a Panel meeting is three members.
- As standard we do not plan to invite PIs to attend the Panel meeting, however, the Panel may request the lead PI provide additional information prior to the Panel meeting, or request the PI attend the meeting if necessary
- Recommendations for each proposal shall be made by consensus and shall be based on the following criteria:
 - Is the project technically feasible?
 - What is the potential impact of project with regard to CRUK strategic priorities?
 - How critical is the project for progression of broader programme of research?
 - How well thought through is the follow up/does follow up seem feasible?
- As well as the final scores for each project there are other factors that need to be considered in prioritising projects (e.g. available capacity within the FGC and balance of projects from different users), as such final decisions shall be taken in collaboration between the Panel and the FGC Office

Appendix 2 – The CRUK Triage Panel Scoring Criteria

Guiding principles for judging proposals

- Principal Investigators will use funding from awarded grants to support projects coming to the FGC and as such the scientific rationale of the overall body of work will have been reviewed extensively by a CRUK Funding Panel and Committee
- However, individual screens/projects that come to the FGC will not necessarily have been reviewed and CRUK want to ensure it supports scientifically sound projects
- Therefore projects need to be reviewed to ensure appropriate assay format and validation plans

Scoring criteria for proposals

1

Technical Feasibility

It should be demonstrated that the proposed project is:

- Using the optimal approach to address the biological question
- Using an appropriate assay format and methodology
- Aligned with capabilities available in the FGC

2

Long-term Deliverability

It should be demonstrated that the proposed project has:

- Buy in from the lead PI (track record/experience in the field)
- A considered and achievable validation strategy
- A team capable of delivering and implementing the validation strategy

3

Strategic priority and impact

Where the FGC has limited capacity for projects, access will be prioritised when projects are:

- Aligned with CRUK strategic priorities (e.g. relevant to a cancer of unmet need, potential patient benefit)
- Facilitating progress of a larger programme of work
- Bringing new capabilities into the FGC