

## **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.

Cancer Research UK-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.

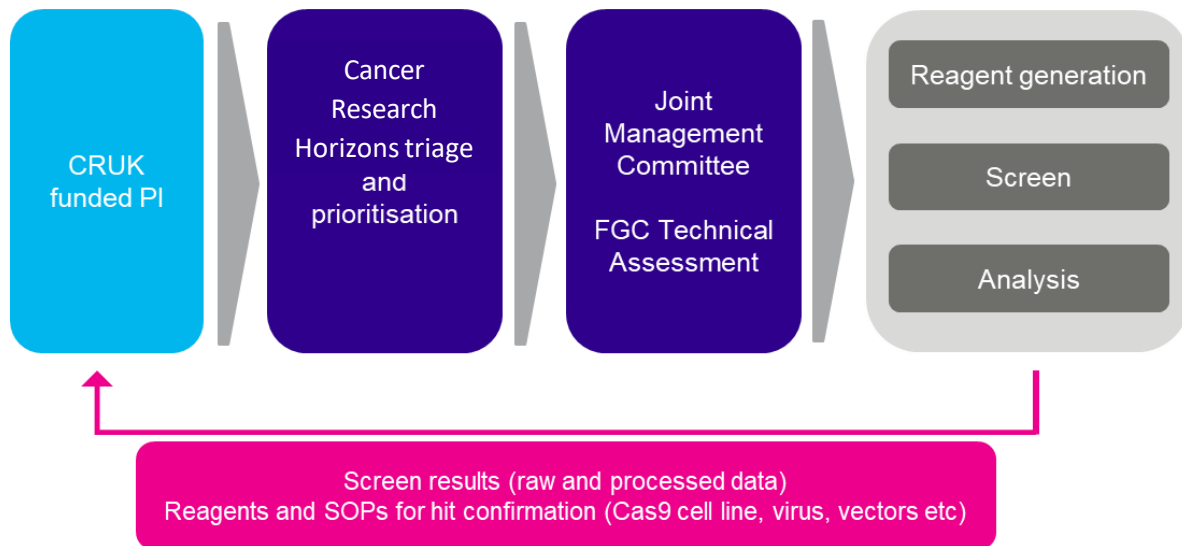
### **Eligibility**

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

- A researcher based at a Cancer Research UK Institute or associated to a Cancer Research UK Centre
- A Cancer Research UK grant holder

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

From April 2021, Cancer Research Horizons will accept proposals where the costs are covered by non-Cancer Research UK grants. Please provide details of the grant you are using to fund the project in your application form.

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 Cancer Research UK 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](mailto:Beatrice.Lana@cancer.org.uk)



## Appendix 1 – The Cancer Research UK 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.

Funded initially for 5 years, the Centre will house 16 scientists from 2020 delivering

- Up to 150 genetic screens (~40 projects) to support AZ-, Cancer Research UK - and collaborative projects
- Ongoing research into state-of-the-art genetic screening, cancer model and data analysis technologies

The FGC will run an equal balance of AZ and Cancer Research UK projects.

Cancer Research UK projects may come from multiple sources including Cancer Research UK funded Principal Investigators (PIs), Cancer Research UK Therapeutic Discovery Labs (**TDL**), and Cancer Research UK Commercial Alliance Partners (i.e. Commercial parties that are engaged in an active alliance with Cancer Research UK).

### Purpose and Remit

Before entering the FGC, all projects, whether originating from AZ or Cancer Research UK, are reviewed by the FGC Joint Management Committee (**JMC**). The Cancer Research UK Triage Panel (**the Panel**) shall have sight of all projects submitted to Cancer Research UK and shall be responsible for reviewing and prioritising these on behalf of Cancer Research UK 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 Cancer Research UK research network with good understanding of Cancer Research UK research strategy and priorities
- The Panel shall include at least one TDL representative
- Members of the Panel shall be appointed for an initial term of one year, which shall be renewable if agreed between Cancer Research UK 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 Cancer Research UK 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 Cancer Research UK 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 Cancer Research UK Funding Panel and Committee
- However, individual screens/projects that come to the FGC will not necessarily have been reviewed and Cancer Research UK 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	2 Long-term Deliverability	3 Strategic priority and impact
<p>It should be demonstrated that the proposed project is:</p> <ul style="list-style-type: none"> <li>- Using the optimal approach to address the biological question</li> <li>- Using an appropriate assay format and methodology</li> <li>- Aligned with capabilities available in the FGC</li> </ul>	<p>It should be demonstrated that the proposed project has:</p> <ul style="list-style-type: none"> <li>- Buy in from the lead PI (track record/experience in the field)</li> <li>- A considered and achievable validation strategy</li> <li>- A team capable of delivering and implementing the validation strategy</li> </ul>	<p>Where the FGC has limited capacity for projects, access will be prioritised when projects are:</p> <ul style="list-style-type: none"> <li>- Aligned with CRUK strategic priorities (e.g. relevant to a cancer of unmet need, potential patient benefit)</li> <li>- Facilitating progress of a larger programme of work</li> <li>- Bringing new capabilities into the FGC</li> </ul>