

TECHNOLOGIES

BENEFITS

- **PERSONALISATION:** Unlike conventional CRISPR libraries, our platform can be personalised with disease-specific genetic signatures.
- **SCALABLE:** It can be applied across various cell lines and species and can capture targets genome-wide or in specific regions.
- **FAST:** Reduces the time of CRISPR library synthesising down to one week, as opposed to two - three months with conventional CRISPR libraries.
- **ACCESSIBLE:** Does not require prior knowledge of genomic sequence or a bioinformatician for designing the libraries.



CONTACT

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PROBLEM

The process of finding disease targets has been revolutionised by the technology known as CRISPR screening. However, current CRISPR screens ignore the genetic diversity present in patient derived disease models and uses off-the-shelf screening libraries.

This one-size-fits-all approach fails to detect more personalized disease targets. In addition, massive parallel oligo design and synthesis for whole genome CRISPR screens is resource intensive and costly.

SOLUTION

Our platform can generate patient and cell-type specific CRISPR screening libraries in a high-throughput and cost-effective manner. It can identify targets both in the coding and non-coding regions of the genome.

	Sanger's personalised Platform	Conventional CRISPR Library
Personalised	Yes	No
Scalable	- Any cell line - Genome-wide to specific regions	Difficult to customise
Time	<1 week	2 - 3 months
Cost	<£100	<£10,000

APPLICATIONS

- Identification of novel targets missed by currently available CRISPR libraries.

INTELLECTUAL PROPERTY

Patent filed on the technology.