

- [Twitter](#) [1]
- [Facebook](#) [2]
- [LinkedIn](#) [3]
- [Google+](#) [4]

Genotypes, Phenotypes and Cancer Evolution



Our vision to improve patient outcome through precisely defining when, who and how to treat can only be achieved by innovating in molecular diagnostics and analytic techniques.

This cross-cutting theme will support our research by developing innovative molecular diagnostic techniques, including in blood-based biomarkers and the monitoring of residual disease, to better understand responses to treatment and cancer evolution.

Theme aims

- To deliver integrated somatic and germline genetic profiling for patients with cancer
- To integrate liquid biopsies with associated genotyping into routine practice for cancer patients to enhance targeted therapy delivery
- To focus adjuvant therapy delivery through more exact prognostication of patients with early stage cancer
- To use the principles of cancer evolution in biomarker development and therapeutic approaches to prevent drug resistance
- To integrate molecular imaging and radiomics with genotyping and phenotyping

Theme lead

Professor Nicholas Turner ^[5] (pictured above): expertise in breast cancer therapeutic biomarker development, including circulating tumour DNA

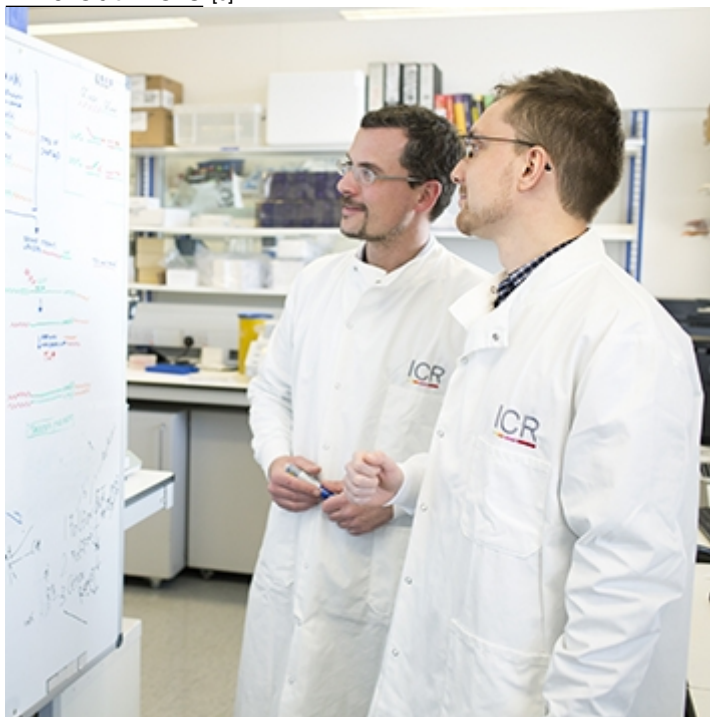


[6]

Liquid assets: biopsies from the bloodstream ^[6]

How assessing biomarkers circulating in the bloodstream could improve the way we treat cancer.

[Find out more](#) ^[6]



[7]

An evolving challenge ^[7]

Learning why tumours evolve is crucial, says Dr Marco Gerlinger, team leader in the ICR's Centre for Evolution and Cancer

Find out more ^[7]

Source URL: <https://www.cancerbrc.org/our-research/genotypes-phenotypes-and-cancer-evolution>

Links

[1] <https://twitter.com/intent/tweet?url=https%3A%2F%2Fwww.cancerbrc.org%2Fprintpdf%2F313>

[2]

<https://www.facebook.com/sharer/sharer.php?u=https%3A%2F%2Fwww.cancerbrc.org%2Fprintpdf%2F313>

[3]

<http://www.linkedin.com/shareArticle?mini=true&url=https%3A%2F%2Fwww.cancerbrc.org%2Fprintpdf%2F313>

[4] <https://plus.google.com/share?url=https%3A%2F%2Fwww.cancerbrc.org%2Fprintpdf%2F313>

[5] <https://www.royalmarsden.nhs.uk/our-consultants-units-and-wards/consultant-directory/professor-nicholas-turner>

[6] <https://www.cancerbrc.org/advance/liquid-assets-biopsies-bloodstream>

[7] <https://www.cancerbrc.org/advance/evolving-challenge>