



Research We Fund



Project:

A new approach for treating colorectal cancer

Research team:

Professor
John Mariadason

What are you trying to achieve?

I hope to develop strong evidence that differentiation therapy may represent a new way to improve outcomes for patients affected with bowel cancer by reducing metastatic spread and enhancing the response of bowel cancers to chemotherapy.

I hope that our pre-clinical findings will provide the rationale for testing a new drug combination in early-phase clinical trials in patients affected by bowel cancer.

Institution: Olivia Newton-John Cancer Research Institute

Cancer type: Bowel

Years funded: 2019–2021

What is the project?

Bowel cancer is the leading cause of cancer related death worldwide. The cause of bowel cancer cells to change shape (loss of differentiation) which allows them to spread around the body are not well understood. Our early work indicates that the loss of two proteins (EHF and CDX1) contributes to the process. We want to establish the role of these proteins in differentiation loss and identify drugs which can reverse this process.

What is the need?

While in the past two decades we've seen the median survival times for patients with metastatic bowel cancer improve from 12 to 30 months, the five-year survival rate for these patients remains below 15%. There is therefore an urgent need to develop new treatments for patients with or who will develop this disease.

Project timeline

| Timeline | 2019 | 2020 | 2021 |
|---|------|------|------|
| Generate a new model to study the role of proteins Ehf and Cdx1 in bowel cancer, and test the effect of combining two drugs. | | | |
| Begin the analysis of the models in which the Ehf and Cdx1 genes have been deleted for the impact on cancer and test the effect of combining the drugs. | | | |
| Complete analysis of the models, prepare and submit manuscripts reporting the findings of our research. | | | |

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