



PINK ROSE

## **Research at the Cambridge Breast Cancer Research Unit**

First the good news – more people than ever are surviving breast cancer thanks to early diagnosis and improved treatment. But there is of course much more we can do, and supporters' donations will help us continue the momentum at the Cambridge Breast Cancer Research Unit, opened in July 2008.

Every year, 40,000 women in the UK are diagnosed with breast cancer, and around 20% of them will die. We are working to reduce this percentage still further by developing different and more selective types of treatment.

The new Cambridge Breast Cancer Research Unit, attached to the Cambridge Breast Unit, provides a focus for the vast programme of clinical and translational research into breast cancer currently carried out, and enables a seamless link from the laboratory to clinical care.

Our research uses molecular bar codes to improve the way we sort cancers into different groups that will then require different treatment. The bar codes are obtained by studying in the laboratory the genes that are present in breast cancer cells. These bar codes will enable us to develop new diagnostic tests and select the best treatment for each individual patient.

The Research Unit has also allowed us to strengthen significantly the clinical research that was already being done in the Breast Unit.

In particular we have been able to start four new projects of clinically-based translational research:

- 1- development and validation of novel imaging modalities for early diagnosis and for monitoring of patients while receiving treatment
- 2- isolation and characterisation of circulating tumour cells in patients with advanced breast cancer with the aim of developing more effective treatment response monitoring
- 3- establishment of an adult breast stem cell programme in Cambridge, which will lead to the development of novel treatment strategies that target the cells that start cancers
- 4- cancer drug development programme specifically focused on aggressive breast cancers

### **These projects will result in improvements into patient management within the next five years.**

The funds from the Pink Rose Valentine's Appeal will be used to support these and other innovative translational research programmes being run at the Research Unit and importantly to create new PhD fellowships for young clinicians that will be trained in Cambridge to become the breast cancer doctors of the future.

