



Cancer Genetics Building

Opened by First Minister of Wales,
Rt. Hon Carwyn Jones AM

2 December 2010



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UNIVERSITY

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Cancer Genetics Building

A new flagship building to help Wales' lead the genetic fight against cancer has been officially opened by the First Minister of Wales, Rt. Hon Carwyn Jones.

Cardiff University's new Cancer Genetics Building – based at the University Hospital of Wales, is a new and dedicated research facility and home to some of Wales' leading experts in cancer genetics.

The new building is provides additional space and facilities for Cardiff University's award winning, Institute of Medical Genetics whose work has already identified genes linked to bowel cancer, Huntington's Disease, muscular dystrophy, tuberous sclerosis and polycystic kidney disease - which are being used in the NHS and abroad, allowing earlier and more accurate diagnosis and increasingly more effective treatments.

Professor Julian Sampson who heads Cardiff University's Institute of Medical Genetics, said: "The new Cancer Genetics building offers a real boost for our research and helps enhance our work unravelling the genetic changes and mechanisms that lead to cancer".

"The new facilities will help us to translate the discoveries we make in the lab and shape them into new tests and treatments for patients."

The new building contains over 1500 sq m of floor space and features two laboratory floors that are fully equipped for research that aims to improve the detection, diagnosis and treatment of cancer and inherited disorders that predispose to tumours.

The striking fixed louvres on the new building have been designed to keep the south facing laboratories cool and are colour-coded to correspond to the sequence of the TSC2 gene that was discovered by Cardiff researchers and that causes tuberous sclerosis, an inherited disorder associated with kidney, brain and other tumours.

Established in 1987 the Institute of Medical Genetics won the 2007 Queen's Anniversary Prize for work identifying genetic causes of diseases and developing new diagnostic tests and treatments for them, bringing benefits for patients and their families.

One of the key features of the new building will be the bringing together of two key areas of research – genetic research that can identify the genetic (DNA) changes associated with cancer and research into the effects of these genetic changes on proteins within cancer cells.



Art & Poems

Scientists at Cardiff University are already leaders in the analysis of DNA damage and its repair.

“Every day the body experiences millions of DNA damaging events within the cells that make up the body,” according to Professor Ray Waters, “We can repair much of this damage, but the precise details of how this happens is still unknown. If DNA damage is not repaired it can cause mutation and cancer.”

Professor Waters’ work has already led to development of a new way of examining DNA damage and repair entire genomes using high resolution microarrays – this new technique enables scientists to quickly analyse the entire human genome.

The new technique could lead to new ways of pre-screening people for responses to specific cancer therapies which damage the DNA in cancer cells.

Dr Waters added: “The wider implications for this research are great – already industry is looking to use this technology for sunscreen and the pharmaceutical and chemical industries could employ it to screen new drugs or chemicals for toxic hazards”.

“This new building will provide a much needed focus for this work.”

The artwork that has been created for the entrance to the Cancer Genetics building is a collaboration between the artist Paul Evans and two award winning poets: Chris Jones and Matthew Clegg. It is entitled *Histogramphy*; a name derived from the term used for the study of organic tissue.

Consisting of three framed paintings and two poems arranged in a loose, cloud-like grid, *Histogramphy* has been informed by a research visit made by the artist and poets to the department in Autumn 2010. Both paintings and poetic texts represent highly personal, emotional reflections on the pioneering work that they observed taking place within the department.

Although the paintings are essential abstract, they can be viewed as subtle evocations of the processes occurring within the living cell; the poems offering a way of 'reading' the paintings and suggesting meanings for these delicate images.

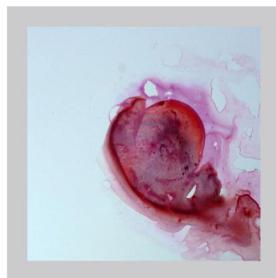
The artwork and poems can be seen overleaf.



Art & Poems



If Blake has shown me
a world in a grain of sand
I didn't expect
my cells would become grains
sitting up my blood, my lymph.



You sift a man's cells
to blueprints, to staggered threads;
to his pulse and breath.



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Contact / Contact



Letter to the Cancer Cell Researcher

As you stoop and focus
On the results of your last cell sample
Each laser-inflected molecule speaks
In its own frequency of coloured light.
The message it tells us
Is hope or its shadow.
You labour to make the invisible
Visible; you teach th at cells are events
Acting thousands of tasks
And communicating
Faster than we can record unaided.
We want you to succeed
Like we do few others.
Can you match faces to slides? Thousands
Crowding to peer through the walls of your lab?
How you can dazzle us
With the Latin tags we don't comprehend
And pray we won't need to.
One message still reaches
Across the gulfs of our understanding:
The diligent passion of your calling.
We hope you can keep the habits of health
And hold on tight to the simple pleasures
Of being in your skin.
You know the smallest things
Can make a change in the air or the light:
They open a sluice of pure endorphin
When discovery happens.

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[http://medicine.cardiff.ac.uk/en/research/
research-groups/cancer-irg/](http://medicine.cardiff.ac.uk/en/research/research-groups/cancer-irg/)

[http://medicine.cardiff.ac.uk/en/departments/
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