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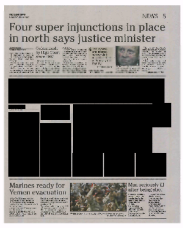
Four super injunctions in place in north says justice minister

# South American frog could hold key to a cancer cure

**Seanin Graham**
Health Correspondent

SCIENTISTS at Queen's University Belfast have unlocked a potential cure for cancer – with the aid of a South American frog.

Proteins found on the skins of the Waxy Monkey Frog and the Giant Firebellied Toad are "secreted" and could be used to treat 70 diseases, including diabetes and stroke as well as deadly tumours.

The award-winning "wonder drug" research, led by Professor Chris Shaw at Queen's School of Pharmacy, has identified two proteins, or 'peptides' in the skin which target the growth of blood vessels grow in the body.

Scientists captured the frogs - during trips to China and South America – and gently extracted the secretions before releasing them back in to the wild. The researchers stress that the frogs are not harmed in any way during this process.

It is hoped the groundbreaking discovery will lead to new treatments for illnesses that affect more than one billion people worldwide.

Critically, they hope that the proteins found in the skin of the Waxy Monkey Frog – a native of South America – will have the power to prevent the spread of cancerous cells and ultimately transform cancer treatment.

"The proteins that we have discovered have the ability to either stimulate or inhibit the growth of blood vessels...a protein from the Waxy Monkey Frog has the potential to kill cancer tumours," Professor Shaw said.

"Most cancer tumours can only grow to a certain size before they need blood vessels to grow into the tumour to supply it with vital oxygen and nutrients.

"Stopping the blood vessels from growing will make the tumour less likely to spread and may eventually kill it. This has the potential to transform cancer from a terminal illness into a chronic condition.

"On the other hand, a protein from the Giant Firebellied Toad, a native of Vietnam, has been found to stimulate blood vessel growth. This has the potential to treat an array of diseases and conditions that require blood vessels to repair quickly, such as wound healing, organ transplants, diabetic ulcers, and damage caused by strokes or heart conditions."

Professor Shaw said he and his research team are now looking to the "natural world" to solve problems – where other types of conventional drugs have failed.

"Despite an investment of around $4-5 billion by scientists and drugs companies around the world, they have yet to develop a drug that can effectively target, control and regulate the growth of blood vessels."

The prize-winning scientist said his aim was to "alleviate human suffering".

"The aim of our work at Queen's is to unlock the potential of the natural world. We are absolutely convinced that the natural world holds the solutions to many of our problems, we just need to pose the right questions to find them.

"It would be a great shame to have something in nature that is potentially the wonder drug to treat cancer and not aim to do everything in our power to make it work."

The researchers last night received the Commendation in the prestigious Cardiovasular Innovation Award at the Medical Futures Innovation Awards in London.

Professor Shaw's team are the only entry from Northern Ireland to be successful at this year's awards.

## Proteins found on skin could be used to treat 70 diseases

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■ **SECRETION:** A Waxy Monkey Frog, native to South America, could be used to cure many diseases with a protein found on its skin