

Precious technology emerges

By Michele Coelho

The digital technology used to create fantastic creatures in *The Lord of the Rings* is now being used in the treatment of severe skin wounds.

A new medical product, Silhouette Mobile, is based on the same 3D scanning technology as the one used to bring Gollum to life.

The new device was developed by the medical arm of Applied Research Associates New Zealand, the 12-year-old company that helped create the digital creatures in the movie trilogy.

The Silhouette Mobile project took two and a half years to complete but according to Bruce Davey, chief executive for ARANZ Medical, ARANZ has always wanted to use state-of-the-art digital photography for medical imaging.

"The idea came from medical imaging concepts but it turns out the first customer was *The Lord of the Rings*," he says.

Silhouette Mobile is a laser device that scans skin wounds and provides a detailed 3D image of the injury.

The device calculates the

wound area and depth without any physical contact.

It stores images and information, making it possible to track the healing process of the wound.

"It tracks the healing rate, if the wound is really healing or if it's healing as expected," says Davey.

According to him, more than \$US20 billion (\$NZ27.2 billion) is spent on wound treatment in the United States but because

Silhouette Mobile provides more accurate information on the injury, the costs of treatment

would be much less.

Davey also says a wound assessment device is needed in New Zealand.

"We spoke to a lot of doctors and nurses to find what the requirement would be, what the needs were and what the market size would be for a product such as this," he says.

A Christchurch home care and nursing association, Nurse Maude, has been testing Silhouette Mobile in its wound unit for six months.

"Our wound measurement was very subjective and we didn't have a way of measuring the depth of the injury but Silhouette

"It turns out the first customer was *The Lord of the Rings*."



PHOTO: ARANZ MEDICAL

SILHOUETTE MOBILE: *The Lord of the Rings* technology is now being used for 3D medical imaging.

is very objective and easy to use," says Catherine Hammond, care specialist for Nurse Maude.

The device also provides graphs with detailed information on the healing process which Hammond says is important in wound assessment.

Silhouette Mobile is one of 21 finalists in the 2007 New Zealand Health Innovation Awards and has also received pre-market approval from the Food and Drug Administration in the United States.

Davey says the FDA's

approval is extremely significant as the US market is the most important market for ARANZ Medical at the moment.

"Silhouette provides much better, more efficient, non contact wound treatment," according to Davey.

Downloading kills the CD single

By Dan Satherley

Video may have killed the radio star, but it's taking a haphazard alliance of compilations and download sites to kill the humble music single.

Last week one of New Zealand's largest specialist music chains, the CD & DVD Store, stopped stocking CD singles.

Mark Campbell, manager of the Vulcan Lane store, blames low sales of the once-dominant format.

"With iTunes and mobile downloads, as well as the *Now* compilations, which have many singles on them, single sales have dropped," he says.

"Back in the good old days when you got a single it would have rare B-sides and alternate versions of the track.

"More recently all they had on them were either the single itself, or some lame dance version of the track," says Campbell.

Auckland music journalist Graham Reid says he is "not remotely surprised" at the chain's decision.

"Singles are selling about as well as books of poetry. There are so few physical singles actually released and bought, it's just a pragmatic decision for the CD & DVD Store not to stock them," says Reid.

He says the end of the physical CD single has been a long time coming.

"We've had this absurd situation where there's been a Single

of the Year and there's been no such single," says Reid, referring to Anika Moa's hit *Youthful*, the New Zealand Music Awards Single of The Year in 2002 on radio play alone.

This year the Recording Industry Association of New Zealand opened up the singles chart to include all individual songs available for purchase.

Previously a song had to be available as a separate physical product in stores to be eligible.

"Downloading has diminished the role of the single to virtually nothing," says Reid.

"They don't do singles between albums the way they used to. The whole culture has changed."

Campbell doesn't believe dropping singles from the shelves will hurt the CD & DVD Store's bottom line.

"We weren't really a singles-driven store as many of our competitors are," he says.

"More recently, albums have sold through what is being played on your favourite TV show, like Snow Patrol on *Grey's Anatomy*, and Journey on *The Sopranos*."

Campbell says singles on their own have never been highly profitable for the chain or the major record labels anyway.

"I think that this will be something that many other retailers will follow."

But Reid says physical singles won't disappear altogether.

"You will find artists will do things like put out box sets or singles you can buy only through the website."

TV campaign - it's not ok!

By Veronica Johnston

An Otago University researcher has mixed feelings about a new television campaign targeting domestic violence.

The 'Family violence - It's not ok!' campaign uses celebrities to change the way people think and act about domestic violence.

Viewers are told to call a toll free number or visit a website if they see, hear or experience violence.

"No one ever said it *was* ok," says Professor David Fergusson from the Christchurch School of Medicine and Health Sciences.

"I don't believe that going on television and telling people not to hit each other will have any impact."

"It's like telling someone not to steal. That isn't going to stop them stealing, is it?"

"If you look at the background of people who hit their partners, you'll sometimes see a history of mental problems for example."

"This is about complicated families that need family support."

He says we need to provide more holistic help for families dealing with substance abuse, poverty, power struggles and mental health disorders.

But Amanda Heath, communications manager for the Families Commission, says the campaign encourages people to seek help.

"Research showed that the first layer of the campaign needed to reset a social norm, to establish that family violence is

not okay and to define the breadth of violence."

She says many people in violent relationships do not get help

because they still think it's something that happens to other people.

"We've already had feedback where people have watched the ads and thought, 'I think they're talking about me. I didn't realise that what I was doing was family violence'."

Recent reports of An An Liu's death reveal her husband's history of violence and mental problems that she once walked away from.

Nai Yin Xue was convicted of assaulting Liu in June and is now wanted for questioning over her violent death.

The *New Zealand Herald* reported National MP Pansy Wong, who met Xue socially, saying she was aware he was having relationship and financial problems.

Clearinghouse outreach coordinator Sheryl Hann says police respond to a family violence incident every seven and a half minutes.

"On average, 14 women, 6 men and 10 children are killed by a member of their family every year."

Professor Fergusson says campaign-circulated statistics like these, which include males as

victims too, help dispel the myth that family violence is a male problem.

Last year he surveyed 828 young people aged 25 years (437 women and 391 men) regarding violence between partners.

"Domestic conflict was present in 70% of relationships with this conflict

ranging from minor psychological abuse to severe assault.

"Men and women reported similar experiences of victimisation and perpetration of domestic violence."

His results suggest young men and women are equally violent towards their partners.

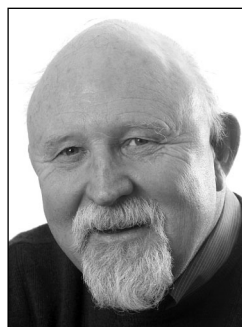
Professor Fergusson says his study also suggests the need to broaden the analysis of domestic violence away from focussing on male perpetrators and female victims, to examining violent couples who use aggression in their relationship.

"This points to family policies that encourage couples to work together to harmonise their relationships and to overcome the collective adversities they face."

Families Commission Chief Commissioner Dr Rajen Prasad argues: "Family violence can only be eliminated if society's attitudes to violence are changed and we raise our children not to tolerate or accept violence as a part of their lives."

"This means individual New Zealanders must stop and examine their attitudes to violence."

"I don't believe that going on television and telling people not to hit each other will have any impact."



DAVID FERGUSSON