

# DISCOVERYREPORTS

## Man's brain rewired after 20-year coma

Updated Wed, Jul. 5 2006 5:08 PM ET

Kimberly Fu , [DiscoveryChannel.ca](#)

For the first time in history, scientists have discovered that a human brain has rewired itself to revive a man in a semi-coma for nearly 20 years.

Terry Wallis of Arkansas, 42, had severe damage to his brain after a traumatic car accident during his teenage years.

Then 19, Wallis was in his car when it plunged into a river. After falling into a brief coma, he emerged into a minimally conscious state where he couldn't move or communicate - save for a couple grunts - for the next two decades.

Now, scientists and neurologists at Cornell University and JFK Medical Centre have found new nerve connections forming where the damaged ones used to be. The nerve fibers were severed, but the cell remained in tact, triggering the re-growth.

A new type of brain imaging technology was used to take photos of the Wallis' brain. The new photos were compared those taken during the time of damage. The scientists found a significant difference, showing a strong regeneration of certain parts.

The exact type of tissue regeneration has not been identified, although scientists think this could shed some light on brain damage recovery. They suspect that Wallis was actually recovering all along.



### RELATED REPORTS

- Placenta holds hints to autism development: researchers**
- Eyes encourage honesty: study**
- Migraine head may ache less with new zapper**
- Hit the books for opium-like high: study**

Man's brain rewired after 20-year coma - Discovery Reports Canada - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://reports.discoverychannel.ca/servlet/an/discovery/1/20060705/060705\_discovery\_man\_coma/20060705?hub=Discov

Customize Links Free Hotmail Windows Media Windows Gap Inc. - Careers - ... Online Speech Bank: ...

Man's brain rewired after 20-year co... Kimberly Fu's portfolio

development: researchers

- Eyes encourage honesty: study
- Migraine head may ache less with new zapper
- Hit the books for opium-like high: study

Now, scientists and neurologists at Cornell University and JFK Medical Centre have found new nerve connections forming where the damaged ones used to be. The nerve fibers were severed, but the cell remained in tact, triggering the re-growth.

A new type of brain imaging technology was used to take photos of the Wallis' brain. The new photos were compared those taken during the time of damage. The scientists found a significant difference, showing a strong regeneration of certain parts.





The exact type of tissue regeneration has not been identified, although scientists think this could shed some light on brain damage recovery. They suspect that Wallis was actually recovering all along.

Wallis is now able to form some complete sentences and count to 25 without being interrupted. He also has movement in his legs, although he cannot walk or feed himself yet. And he is slowly beginning to remember life before the accident: when he was married to his 17-year-old wife with his six-week-old daughter, and when Ronald Reagan was President.

The study was published in the latest Journal of Clinical Investigation.

**USER TOOLS**

- Print This Page
- E-Mail Story
- Feedback

    Discovery World Wide Other Channels

© 2006 Bell Globemedia Inc. All Rights Reserved.

Privacy Policy | Producer Enquiries | Terms and Conditions | Contact Us | Newsletter

Done

Low-calorie diet can be fountain of youth: study - Discovery Reports Canada - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://reports.discoverychannel.ca/servlet/an/discovery/1/20060705/060705\_discovery\_muscle/20060705?hub=DiscoveryF

Customize Links Free Hotmail Windows Media Windows Gap Inc. - Careers - ... Online Speech Bank: ...

Low-calorie diet can be fountain of yo... Kimberly Fu's portfolio

# DISCOVERYREPORTS

## Low-calorie diet can be fountain of youth: study

Updated Wed, Jul. 5 2006 5:16 PM ET

*Kimberly Fu*

A sparse diet, minimal in calories but with all the essential nutrients, may be just the ticket to achieving eternal youth, according to a new Canadian study.

Researchers at the University of Calgary have shown muscle function strengthening in an aging body when paired with caloric restriction.


Scientists at U of C found that the mitochondria - the energy source in cells - function better over the years while on this diet.

They say going on such a regimen will eventually lead to a healthier and more active life, as the light diet prevents muscle function from deteriorating: a problem more and more common with age.

The study was done on elderly rats that were fed the calorie-reduced diet over the years.

The results showed the elderly rats had more toned, buffed bodies: much like rats half their age.

The rats had no decline in muscle function, even though some were as old as 26 years (about 70 to 80 years in human terms.)



SMIRNOFF ICE INVIGORATING TASTE OF SMIRNOFF ICE

### USER TOOLS

Print This Page E-Mail Story Feedback

Done

# DISCOVERYREPORTS

## Decades-old vaccines not the cause of disease: study

Updated Wed, Jul. 5 2006 5:05 PM ET

Kimberly Fu , DiscoveryChannel.ca

Measles, mumps and rubella (MMR) vaccinations are unrelated to the cause of developmental diseases, according to new research.

The two have been linked for years, but a study done by the McGill University Health Centre has found that MMR vaccines are not the cause of diseases such as autism.

The McGill scientists also found thimerosal vaccines to be unrelated. Thimerosal is a mercury base that acts as a preservative for MMR vaccines.

Thimerosal was slowly phased-out after experts thought it was linked to autism. But the study found that chances for autism were actually higher after thimerosal was removed.

Due to this common misconception, parents have avoided giving their children MMR vaccinations. After MMR coverage decreased in the late 1990's, the number of children with autism doubled.

Autism is one of the most common childhood disorders, with one child in every 155 affected.

Now that scientists are fairly certain that MMR vaccinations aren't the culprit, experts must now figure out why autism is so common.



### RELATED REPORTS

- [Spanish flu survivor could hold key to bird flu](#)
- [Humans may now be bird-flu transmitters](#)
- [Human lungs stave-off bird flu](#)
- [More reliable version of Tamiflu probable: study](#)

### USER TOOLS

- Print This Page
- E-Mail Story
- Feedback

Saharan desert ant counts steps for direction - Discovery Reports Canada - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://reports.discoverychannel.ca/servlet/an/discovery/1/20060704/060704\_discovery\_ants/20060705?hub=DiscoveryRej


Customize Links Free Hotmail Windows Media Windows Gap Inc. - Careers - ... Online Speech Bank: ...

Saharan desert ant counts steps for ... Kimberly Fu's portfolio

Click to experience

DISCOVERYREPORTS: Japanese invention lets you smell the roses - whenever, whereve\_

# DISCOVERYREPORTS



**Saharan desert ant counts steps for direction**  
Updated Wed, Jul. 5 2006 10:14 AM ET  
*Kimberly Fu, DiscoveryChannel.ca*

Forget the GPS tracking system. A recent study has shown that the Saharan desert ant has an internal pedometer that helps it get back to its nest.


Image: DCI

Researchers at the University of Ulm in Germany extended the legs of the ants by gluing stilt-like bristles to them and watched as the ants walked.

Later, the bristles were removed. The ants then stopped short of their journey because it seemed that their previous stride count was used as a reference. With the bristles off and a different gait, the ants had no reference point from which to return home, the researchers claim.

This theory was introduced in 1904, but hasn't been tested or proven until now. Scientists previously determined how the ant finds direction in the desert by the polarization of light, but have never fully understood how they measured their distance.

The Saharan desert ant also memorizes the position of certain landmarks to help find their way across the vast terrain.



ASK THE PLANET 2006!

ANSWER THE WORLD'S BIGGEST QUESTIONS.  
WIN THE WORLD'S COOLEST PRIZES.

Answer Now (For a chance to win) YAHOO! ANSWERS

### RELATED REPORTS

- Ants more ancient than previous estimates
- Nanotechnology: A visitor's guide to the microverse

**USER TOOLS**

Print This Page E-Mail Story Feedback

Done



## Sleep meds may do more harm than good: study

Updated Tue. Jul. 4 2006 6:31 PM ET

Kimberly Fu, DiscoveryChannel.ca

Medications that treat jetlag or similar disorders may actually be doing you a disservice. That's according to U.S. researchers who say when it comes to your body's internal clock, medical science may actually have things completely backwards.

In the past, scientists have used a protein called PER to measure your internal clock.

Most of the time, you want to have fairly steady levels of PER.

Scientists have long thought that during a body clock malfunction, breakdown of PER present in your body slows down, causing the PER to accumulate. This is called a "Tau mutation".

However, the new research has shown that the Tau mutation doesn't slow down the breakdown process. It speeds it up, creating a lack of PER, rather than an accumulation.

As a result, medications may be getting rid of essential PER that is needed to regulate your body clock again. This opposite effect can cause insomnia, depression, and some forms of cancer.

ASK THE PLANET 2006!

ANSWER THE WORLD'S BIGGEST QUESTIONS.  
WIN THE WORLD'S COOLEST PRIZES.

Answer Now (For a chance to win)

YAHOO! ANSWERS CANADA

### RELATED REPORTS

- Do you think you're fat? Doctors have some novel things you can blame
- Light-up duvet could coax you out of bed



A dolphin swims near a sonar apparatus

## Sonar equipment banned off Hawaii coast

Updated Wed. Jul. 5 2006 10:19 AM ET

Kimberly Fu, DiscoveryChannel.ca

A California district judge has ordered the U.S. Department of National Defense to stop using all sonar equipment along the marine-dense Hawaii coast.

Sonar equipment can damage and kill many ocean species, according to marine scientists and environmental groups.

The ban follows a request for a restraining order by environmentalists in the area. The order was aimed at preventing the war games scheduled along the Pacific.

The U.S. Navy planned to exercise the use of high-power sonar equipment while undergoing a training program dubbed Rim of the Pacific (RIMPAC).

Forty ships and six submarines had been scheduled to participate in the international exercise. Canada, Chile, South Korea, Australia, and the UK are also involved.

Sonar equipment emits sound waves that bounce off the sea floor, measuring the time it takes for the sound to reach the floor and back. The contours of the sea can then be plotted on a map to help detect submarines and ships within a certain radius.

During the 2004 RIMPAC exercise, about 200 melon-headed whales were found stranded on the edge of Hanalei Bay off the island of Kauai.

- ### RELATED REPORTS
- Dolphins know each other by "name": researchers
  - Navy applies for permission to 'harass' marine life
  - Mass whale death still a mystery: experts

