

## News feed archive January – March 2014

**28/03/2014**

Tickling rats could lead to new antidepressant medications.

[http://www.newscientist.com/article/dn25312-do-animals-have-a-sense-of-humour.html#.UzVYU\\_l\\_uPY](http://www.newscientist.com/article/dn25312-do-animals-have-a-sense-of-humour.html#.UzVYU_l_uPY)

Flu vaccines are manufactured using chickens' eggs, but conditions inside the egg could drastically alter how effective the resulting vaccines are.

<http://www.nature.com/news/mutations-explain-poor-showing-of-2012-flu-vaccine-1.14940>

The moving moment in which a woman was able to hear for the first time, thanks to cochlear implant developed using cats, has been captured on video.

<http://www.bbc.co.uk/news/uk-england-tyne-26779079>

**27/03/2014**

Infections during the early stages of Alzheimer's disease lead to increased levels of brain inflammation in mice.

<http://www.telegraph.co.uk/health/healthnews/10722884/Infections-could-worsen-dementia.html>

We've always known that New Caledonian crows were smart by bird standards, but new research suggests that they have a working understanding of the Archimedes Principle.

<http://www.thetimes.co.uk/tto/science/article4046043.ece>

A Cuvier's beaked whale is the new record holder for a deep-diving mammal, travelling to 3km below the ocean surface in a dive that lasted 137 minutes.

<http://www.bbc.co.uk/news/science-environment-26743090>

**26/03/2013**

Intense X-rays have been used to film inside an insect's body in flight.

<http://www.bbc.co.uk/news/science-environment-26747914>

A genetic model of bipolar disorder has been created using the stem cells of sufferers, which doesn't require the use of animals.

[http://www.newscientist.com/article/dn25291-stem-cells-offer-clue-to-bipolar-disorder-treatment.html#.UzK-ufI\\_uPY](http://www.newscientist.com/article/dn25291-stem-cells-offer-clue-to-bipolar-disorder-treatment.html#.UzK-ufI_uPY)

Goats are much smarter than you think, according to the Times, being able to solve a puzzle and obtain a tasty pasta treat in the same amount of time that a chimpanzee would take.

<http://www.thetimes.co.uk/tto/science/article4045063.ece>

**25/03/2014**

A high fat diet in pregnancy could increase the risk of Alzheimer's disease for offspring according to new research using mice.

<http://www.telegraph.co.uk/health/elderhealth/10719174/Alzheimers-Disease-risk-may-begin-in-the-womb.html>

Research from the University of Sheffield has shown that 'extramarital' activity in birds is linked with the adult sex ratio of the population.

<http://www.thetimes.co.uk/tto/environment/wildlife/article4043622.ece>

**24/03/2014**

Dogs can suffer from a range of "human" conditions, such as epilepsy, haemophilia, cancer and even obsessive compulsive disorder, and as a result dogs are emerging as one of the most important models of human hereditary disease.

<http://www.bbc.co.uk/news/health-26679218>

By "exploding" cancer cells researchers from Stockholm have been able to reverse the growth of brain tumours in mice.

<http://www.independent.co.uk/news/science/exploding-cancer-cells-scientists-discover-new-way-to-combat-the-disease-9206264.html>

Warmer springs have led to an increase in the UK population of long-tailed tits, according to a 19-year study by scientists at Sheffield University.

<http://www.bbc.co.uk/nature/26687503>

**20/03/2014**

A protein that protects ageing neurons from damage has been identified in studies using mice.

<http://news.sciencemag.org/brain-behavior/2014/03/stressed-out-brain-cells-may-protect-against-alzheimers>

Giant Burmese pythons have shown a 'homing instinct' that works over vast distances.

<http://www.bbc.co.uk/news/science-environment-26635939>

**19/03/2014**

Bacteria can be engineered to monitor the state of a live animal's gut and report on the presence of certain chemicals, according to new research using mice.

[http://www.newscientist.com/article/dn25244-hacked-bacteria-keep-tabs-on-the-health-of-the-gut.html#.Uylmdvl\\_uPY](http://www.newscientist.com/article/dn25244-hacked-bacteria-keep-tabs-on-the-health-of-the-gut.html#.Uylmdvl_uPY)

Researchers at Yale have reproduced human immune function in a mouse, creating a new model that will allow researchers to address important questions about how the human immune system fights diseases like cancer.

<http://news.yale.edu/2014/03/17/breaking-new-ground-yale-team-implants-human-innate-immune-cells-mice>

Statins may be useful in treating advanced multiple sclerosis in humans according to the results of a phase II clinical trial and almost ten years of animal studies.

<http://www.bbc.co.uk/news/health-26630025>

Debbie Vincent, animal activist and member of SHAC, has been found guilty of conspiracy to blackmail and will be sentenced in April.

<http://www.bbc.co.uk/news/uk-england-26636281>

### 18/03/2014

Mice carrying a mutated copy of 'breast cancer gene' BRCA1, which protects against cancer by repairing damaged DNA, had smaller brains than those with a normal copy of the gene.

<http://news.sciencemag.org/biology/2014/03/famous-breast-cancer-gene-could-affect-brain-growth>

Scientists from the Royal Veterinary College have identified the mode of action for a pig virus that kills millions of domestic pigs annually.

<http://phys.org/news/2014-03-weaning-multisystemic-syndrome.html>

The New Scientist covers the phenomenon of 'evolution traps' – situations where animals become 'bamboozled' by rapid environmental change making them unable to accurately assess the suitability of food, mates or habitats.

[http://www.newscientist.com/article/mg22129600.700-evolutions-traps-when-our-world-leads-animals-astray.html#.UygaNvl\\_uPY](http://www.newscientist.com/article/mg22129600.700-evolutions-traps-when-our-world-leads-animals-astray.html#.UygaNvl_uPY)

### 17/03/2014

A combination of imaging techniques has revealed how a drug can prevent the growth of prostate cancer in mice.

<http://www.cancerresearchuk.org/about-us/cancer-news/press-release/new-imaging-approach-fast-tracks-drug-testing-for-incurable-prostate-cancer>

A painkiller made from snail venom has been shown to significantly reduce pain in rats.

<http://www.dailymail.co.uk/health/article-2582114/Scientists-use-venom-cone-snails-create-painkillers-powerful-morphine.html>

Tom Whipple writes for *The Times* about the training that research beagles go through at Harlan to prepare them for life in the laboratory.

<http://www.thetimes.co.uk/tto/science/article4034652.ece>

**14/03/2014**

A mouse that expresses a fluorescing biosensor in every cell of its body could allow the progression of diseases or disease treatments to be tracked through the body in real time.

<http://medicalxpress.com/news/2014-03-versatile-mouse-diseases-drugs.html>

A baby gorilla has been born at San Diego Zoo following a rare animal caesarean section. 18 year old mother Imani was given the emergency procedure after her labour failed to show any signs of progress.

<http://www.telegraph.co.uk/earth/earthvideo/10697413/Baby-gorilla-born-after-rare-animal-C-section.html>

*Science* magazine considers the magic of surface tension: how insects can use it walk on water, and how it effects the basic bodily functions of smaller mammals.

<http://news.sciencemag.org/biology/2014/03/secret-walking-water>

**13/03/2014**

Previous reports of a 'fat gene' may have been mistakenly looking in the wrong place, according to new research in zebrafish, mouse and human cells.

<http://www.nature.com/news/new-contender-for-fat-gene-found-1.14863>

Three rare Sumatran tiger cubs born in London Zoo in February have been revealed to the public for the first time via hidden cameras.

<http://www.telegraph.co.uk/earth/earthvideo/10692543/Rare-tiger-cubs-born-in-London-Zoo.html>

Researchers at Plymouth University have developed a three dimensional cell culture model of a fish liver using cells from a rainbow trout, that could be used to reduce the numbers of fish needed for research.

<http://www.plymouthherald.co.uk/Virtual-fish-save-lives-millions-lab-animals/story-20800210-detail/story.html>

A new report from the Federation for American Societies for Experimental Biology (FASEB) shows that animal rights extremist in the US are increasingly targeting individuals as part of their campaigns.

<http://www.faseb.org/Portals/2/PDFs/opa/2014/Animal%20Extremism%20Report%20Final.pdf>

The NC3Rs has launched a Chinese language version of its 'Procedures With Care' website, a series of instructional videos designed to "provide easily achievable standards and improve animal welfare."

<http://www.nc3rs.org.uk/news.asp?id=2072>

**12/03/2014**

A Welsh man has had extensive facial reconstruction surgery using 3D printed parts, a technique that was originally pioneered in animal studies.

<http://www.bbc.co.uk/news/uk-wales-26534408>

Identical twin astronauts have volunteered themselves for an investigations into the health effects of space.

[http://www.newscientist.com/article/dn25198-first-twin-astronauts-take-on-space-microbiome.html#.UyA5QvI\\_uPY](http://www.newscientist.com/article/dn25198-first-twin-astronauts-take-on-space-microbiome.html#.UyA5QvI_uPY)

Female spiders that cannibalise their mates become more attractive to other males according to research from the USA.

[http://www.newscientist.com/article/dn25199-zoologger-female-spider-kills-male-to-attract-a-mate.html#.UyA4k\\_I\\_uPY](http://www.newscientist.com/article/dn25199-zoologger-female-spider-kills-male-to-attract-a-mate.html#.UyA4k_I_uPY)

#### **11/03/2014**

Lydia, a great white shark that has now crossed the mid-Atlantic ridge en route for the Cornwall coast, may be pregnant according to the scientists tracking her.

<http://www.bbc.co.uk/news/science-environment-26514827>

Electroacupuncture in mice has been found to reduce the inflammation associated with sepsis.

<http://www.nih.gov/researchmatters/march2014/03102014sepsis.htm>

Elephants appear to be able to distinguish between the languages and dialects spoken by different ethnic groups of humans, and determine which of these they consider “dangerous”.

<http://www.nature.com/news/elephants-recognize-the-voices-of-their-enemies-1.14846>

Conservationists in New Zealand are celebrating the successful hatching of an endangered Kakapo egg, made even more remarkable because the broken egg was held together with sellotape and glue.

<http://www.independent.co.uk/news/science/saving-a-crushed-egg-with-tape-and-glue-why-you-should-care-about-the-kakapo-9181945.html>

The author of two papers showing that adult mammalian stem cells could be converted into pluripotent stem cells has called for the studies to be withdrawn amidst concerns from the scientific community that the results cannot be replicated.

<http://blogs.nature.com/news/2014/03/call-for-acid-bath-stem-cell-paper-to-be-retracted.html>

#### **10/03/2014**

A species of spider monkeys has been found to live in sexually segregated societies, because males may attack the females if the two sexes spend too much time together.

[http://www.newscientist.com/article/dn25173-spider-monkey-society-is-sexually-segregated.html#.Ux2it\\_I\\_uPY](http://www.newscientist.com/article/dn25173-spider-monkey-society-is-sexually-segregated.html#.Ux2it_I_uPY)

#### **06/03/2014**

A gene therapy technique developed using mice that ‘upgrades’ the immune system to resist the HIV virus has been successfully trialled in humans.

<http://www.bbc.co.uk/news/health-26451427>

Vaccinating mice could reduce the spread of tick-borne bacterial infections like Lyme disease in humans.

[http://www.newscientist.com/article/dn25168-mouse-vaccine-could-protect-humans-from-lyme-disease.html#.UxhDRPI\\_uPY](http://www.newscientist.com/article/dn25168-mouse-vaccine-could-protect-humans-from-lyme-disease.html#.UxhDRPI_uPY)

*Nature* have an excellent feature article about epigenetics, the relatively new field of genetics that examines how our genes can be affected by changes to environment, and how these changes can be heritable.

<http://www.nature.com/news/epigenetics-the-sins-of-the-father-1.14816>

The MRC have created a new video showing how mice are used at the Mammalian Genetics Unit to study the genetic basis of deafness, and a potential new treatment for glue ear in children.

<http://www.insight.mrc.ac.uk/2014/03/05/video-using-mice-in-hearing-research/>

The University of Hawaii has developed an environmentally friendly way of disposing of its laboratory mice, which has caused some consternation and a number of sensational headlines.

[http://www.huffingtonpost.com/2014/03/05/tissue-digester-systems\\_n\\_4900136.html](http://www.huffingtonpost.com/2014/03/05/tissue-digester-systems_n_4900136.html)

#### **05/03/2014**

Two studies examining the link between protein consumption and lifespan/disease susceptibility have been published this week, including one using mice.

<http://news.sciencemag.org/biology/2014/03/low-protein-diet-may-extend-lifespan>

Surgical screws made of natural silk, which will eventually dissolve in the body, have been tested on rats by implanting them into the hind limbs of rats.

<http://www.bbc.co.uk/news/health-26438497>

Tiny satellite tags have been used to track the mysterious movements of baby loggerhead turtles.

<http://www.bbc.co.uk/news/science-environment-26435342>

#### **04/03/2014**

A 3D-printed external membrane that stretches over heart muscle to keep it pumping indefinitely has been demonstrated on a rabbit heart.

<http://www.dailymail.co.uk/news/article-2571917/Membrane-heart-pumping-forever-possibly-prevent-heart-attacks.html>

Babies with incurable spinal muscular atrophy, or 'floppy baby syndrome', could be treated using a chemical found in some plants according to tests using flies, zebrafish and mice.

<http://www.bbc.co.uk/news/uk-scotland-edinburgh-east-fife-26419498>

Sensors attached to the shells of oysters can monitor their health and wellbeing, allowing oyster farms to associate changes in water conditions with the health of the animals.

[http://www.newscientist.com/article/mg22129584.500-sensor-backpacks-for-oysters-say-when-they-are-happy.html#.UxWtn\\_nV\\_9U](http://www.newscientist.com/article/mg22129584.500-sensor-backpacks-for-oysters-say-when-they-are-happy.html#.UxWtn_nV_9U)

**03/03/2014**

Scientists from Imperial College London funded by Cancer Research UK have shown that a non-invasive scan can detect dormant cancer cells in mice.

[http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news\\_28-2-2014-11-44-43](http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_28-2-2014-11-44-43)

Using pancreatic tumours from living cancer patients grafted onto mice, researchers have been able to identify a metabolic pathway that could be targeted to treat the cancer.

[http://www.newscientist.com/article/mg22129583.000-pancreatic-cancers-killer-trick-offers-treatment-hope.html#.UxREsPI\\_uPY](http://www.newscientist.com/article/mg22129583.000-pancreatic-cancers-killer-trick-offers-treatment-hope.html#.UxREsPI_uPY)

A technique called thermogenetics allows researchers to control the behaviour of a fruit fly by activating specific neurons with heat.

<http://www.nature.com/news/laser-beam-makes-flies-flirt-1.14794>

**28/02/2014**

The distinctive smell of a male goat is enough to trigger ovulation in a female, according to new research from Japan.

<http://www.nature.com/news/male-scent-stimulates-female-goats-fertility-1.14788>

Having an extra chromosome is usually a problem for mammalian reproduction, but not so for the pygmy mouse.

<http://www.newscientist.com/article/dn25132-zoologger-superfemale-mice-have-secret-male-dna.html#.UxB2wYXPvDw>

**27/02/2014**

The bright blue blood of the horseshoe crab has an unusual property: chemicals in its blood cells can detect trace amounts of bacterial presence in a liquid and trap them in inescapable clots, which is now being used in place of animal tests to test batches of drugs for contamination.

<http://www.theatlantic.com/technology/archive/2014/02/the-blood-harvest/284078/>

**26/02/2014**

A method for creating 'mini-livers' from the stem cells of adult mice has been awarded the NC3Rs prize for a scientific advance with the most potential to replace, reduce or refine the use of animals in science.

<http://www.nc3rs.org.uk/news.asp?id=2067>

A common anaesthetic used to kill zebrafish after research may not be the most humane option, according to two recent studies.

<http://www.nature.com/news/fish-kill-method-questioned-1.14768>

Monkeys are more likely to cooperate during the 'prisoner's dilemma' when working with another monkey rather than a computer.

<http://www.nature.com/news/monkey-brains-wired-to-share-1.14765>

*New Scientist* consider whether invertebrates, specifically squid, octopus and lobsters can feel pain.

[http://www.newscientist.com/article/mg22129570.600-do-invertebrates-feel-pain.html#.Uw3FNPI\\_uPY](http://www.newscientist.com/article/mg22129570.600-do-invertebrates-feel-pain.html#.Uw3FNPI_uPY)

#### **25/02/2014**

Compounds formed during the cooking of meats have been linked to the build-up of Alzheimer's disease-causing proteins in mice.

<http://www.bbc.co.uk/news/health-26323720>

Fears of their extinction had been greatly exaggerated, as two axolotls have been found in Mexico City Lake.

<http://www.independent.co.uk/environment/axolotl-found-in-mexico-city-lake-after-scientists-feared-it-only-survived-in-captivity-9148775.html>

Middle Eastern Respiratory virus (MERS) has previously been found in camels, but now researchers believed that the animals may have been harbouring the virus for around twenty years or more.

<http://news.sciencemag.org/health/2014/02/deadly-mers-virus-has-infected-camels-least-1992>

#### **24/02/2014**

Cells within the inner ears of new born mice are capable of regenerating the sensory cells associated with hearing that are destroyed during illness or by loud noise.

<http://news.sciencemag.org/biology/2014/02/baby-steps-toward-healing-hearing>

A report published in the journal *Science* has suggested that eco-tourism could be effective in saving the lemurs of Madagascar from extinction.

<http://www.bbc.co.uk/news/science-environment-26288351>

A sabre-toothed frog found in West Africa appears to be genetically isolated from other frog species in the area.

[http://www.newscientist.com/article/dn25100-zoologger-sabretoothed-frog-is-an-evolutionary-loner.html#.UwslTfl\\_uPY](http://www.newscientist.com/article/dn25100-zoologger-sabretoothed-frog-is-an-evolutionary-loner.html#.UwslTfl_uPY)

#### **21/02/2014**

Neurons that may prevent the formation of fearful memories have been identified in the hippocampus part of the brain in mice.

<http://www.bbc.co.uk/news/science-environment-26249509>

The canine brain reacts in the same way to voices as a human brain, according to a study that trained pet dogs to sit in MRI brain scanners.

<http://www.bbc.co.uk/news/science-environment-26276660>

Jon Hotchkiss writes for the Huffington Post about the activities of anti-research activists at UCLA.

[http://www.huffingtonpost.com/jon-hotchkiss/ucla-scientists-threatene\\_b\\_4801052.html](http://www.huffingtonpost.com/jon-hotchkiss/ucla-scientists-threatene_b_4801052.html)

#### **20/02/2014**

Injecting a drug into the eyes of completely blind mice has restored their sensitivity to light, and potentially their vision.

[http://www.newscientist.com/article/dn25082-blind-mice-see-the-light-after-simple-drug-therapy.html#.UwXYrvI\\_uPY](http://www.newscientist.com/article/dn25082-blind-mice-see-the-light-after-simple-drug-therapy.html#.UwXYrvI_uPY)

Euthanizing beached whales is a complex process involving long needles and powerful drugs, which can sometimes cause inadvertent environmental damage.

<http://www.theguardian.com/science/blog/2014/feb/19/whale-euthanasia-vets-kill-stranded-leviathans-humanely>

The bumblebee is under threat from two diseases that originally affected honeybees. Deformed wing virus and a fungal parasite were found in bees across England, Scotland and Wales according to a study published in *Nature*.

<http://www.bbc.co.uk/news/science-environment-26242960>

*The Express* reports on a study published in *Nature* in which researchers identified potential immune system receptors in mice that, if activated, could prevent the spread of cancer through the body.

<http://www.express.co.uk/news/health/460676/Cancer-Pill-that-could-stop-deadly-disease-spreading-on-the-horizon-after-breakthrough>

#### **19/02/2014**

The brain of one monkey has been used to control the movements of another “avatar” monkey in research that could one day enable paralysed people to regain motor control of their bodies.

<http://www.bbc.co.uk/news/health-26224813>

I’ll be honest, the picture accompanying this article was too wonderful not to include it today.

<http://www.independent.co.uk/news/science/elephants-console-each-other-in-times-of-distress-9136513.html>

Wesley Smith, author of Human Exceptionalism, compares the aims of the UK Government plan to reduce the use of animals in research with the more black and white concerns of the animal rights movement, and uses the report to highlight key differences between animal welfare and animal rights.

<http://www.nationalreview.com/human-exceptionalism/371362/uk-right-reduce-animals-used-research-wesley-j-smith>

**18/02/2014**

A project is underway to radio tag Narwhals in the arctic in an attempt to understand the migration and behaviour of these animals.

[http://www.newscientist.com/article/mg22129564.500-the-worlds-weirdest-whale-hunt-for-the-sea-unicorn.html#.UwMvYfl\\_uPY](http://www.newscientist.com/article/mg22129564.500-the-worlds-weirdest-whale-hunt-for-the-sea-unicorn.html#.UwMvYfl_uPY)

The US city of Chicago is at action stations to prevent an invasive species of carp from entering the Great Lakes.

<http://www.bbc.co.uk/news/science-environment-26017956>

Studies in macaques and cows have shown that mothers tailor the quantity and content of their milk depending on the sex of their offspring.

[http://www.insidebayarea.com/ci\\_25145819/animal-mothers-customize-milk-depending-babys-sex?source=most\\_email](http://www.insidebayarea.com/ci_25145819/animal-mothers-customize-milk-depending-babys-sex?source=most_email)

A potentially ground-breaking series of Japanese papers, which showed that pluripotent stem cells could be generated by bathing mature cells in acid, have been called into question following numerous failed attempts to replicate the results.

<http://www.nature.com/news/acid-bath-stem-cell-study-under-investigation-1.14738>

**17/02/2014**

Rats have been used to test a tiny rod that can reel in human cancer cells from the brain and kill them.

[http://www.newscientist.com/article/dn25063#.UwHhXvl\\_uPY](http://www.newscientist.com/article/dn25063#.UwHhXvl_uPY)

Radioactive markers and routine radiology techniques have enabled scientists to track the spread of simian immunodeficiency virus (SIV, the monkey equivalent of HIV) through the body and map the build-up of viral reservoirs.

<http://www.nature.com/news/radioactive-tracers-map-spread-of-hiv-analogue-1.14704>

The ICARUS (International Cooperation for Animal Research Using Space) project plans to record the realtime migrations of around 1000 birds and bats using lightweight tracking tags.

<http://www.economist.com/blogs/babbage/2014/02/seismology>

Thawing ice in the arctic has brought beluga whales into contact with cat parasite *Toxoplasma gondii* according to new research from the University of British Columbia.

<http://www.dailymail.co.uk/sciencetech/article-2561071/Cat-parasite-deadly-humans-beluga-whales-microbes-frozen-ice-melted.html>

**14/02/2014**

Orang-utans are highly threatened by continued logging in Borneo, but new research suggests that they are capable of surviving in patchy rainforest by leaving the trees for short periods.

<https://www.sciencenews.org/article/orangutans-hit-ground-walking>

Oxford University student newspaper The Cherwell has published a piece about animal research at the University.

<http://www.cherwell.org/news/topstories/2014/02/13/investigation-animal-testing>

**13/02/2014**

A potential new treatment approach for Alzheimer's disease has been identified using a mouse model of the disease, in research funded by Alzheimer's Research UK.

<http://www.alzheimersresearchuk.org/news-detail/10977/Study-in-mice-suggests-new-treatment-approach-for-Alzheimers/>

Designer dogs may live their lives in severe pain caused by having skulls that are too small for their brains, according to a large-scale study that used MRI scanning to image the brains of small dogs.

<http://www.thetimes.co.uk/tto/science/article4003905.ece>

'Flashes' of free radicals produce by mitochondria have been detected in nematode worms, and can be used to predict the worms' lifespan.

[http://www.newscientist.com/article/dn25040-lifespan-predicted-from-flashes-in-worm-cells.html#.UvySs\\_I\\_uPY](http://www.newscientist.com/article/dn25040-lifespan-predicted-from-flashes-in-worm-cells.html#.UvySs_I_uPY)

Using high resolution satellite images scientists are able to count whales from space.

<http://www.bbc.co.uk/news/science-environment-26075274>

Andreas Kreiter writes for Nature about the reality of being targeted by both animal rights extremists and local government over neurological experiments using monkeys.

<http://www.nature.com/news/science-at-the-sharp-end-of-oppressive-politics-1.14694>

**12/02/2014**

The progression of macular degeneration was slowed by regular exercise in a mouse model of the disease.

<http://www.thetimes.co.uk/tto/health/news/article4002809.ece>

Following the news that pluripotent mouse stem cells were created by bathing regular cells in a mild acid bath, The Independent reports that the same technique has been used successfully on human cells.

<http://www.independent.co.uk/news/science/exclusive-the-miracle-cure--scientists-turn-human-skin-into-stem-cells-9117102.html>

A new test that uses lasers to identify the bacteria that cause meningitis has been developed by researchers at the University of Strathclyde.

<http://www.bbc.co.uk/news/uk-scotland-glasgow-west-26146806>

**11/02/2014**

Research funded by the charity Breakthrough Breast Cancer has identified a gene in mice that prevents breast cancer cells from spreading.

<http://www.breakthrough.org.uk/news/all-news/gene-prevents-breast-cancer-spread-stopping-cells-becoming-%E2%80%98sticky%E2%80%99>

**10/02/2014**

The levels of chloride ions present in the nerves at birth could contribute to the development of autism according to new research using mouse models for the disease.

<http://www.independent.co.uk/news/science/new-insights-into-the-mystery-of-autism-could-it-be-caused-at-birth-by-salt-in-the-nerves-9112720.html>

A stem cell transplant has proved successful in treating mice with high blood sugar levels, designed to mimic the symptoms of type 1 diabetes.

<http://www.theguardian.com/society/2014/feb/06/scientists-closer-stem-cell-cure-type-1-diabetes>

Mice exposed to the THC found in cannabis showed an increased sense of smell, stimulating increased feeding.

[http://www.newscientist.com/article/dn25018-why-so-munchy-cannabis-shown-to-ramp-up-sense-of-smell.html#.UvjBVvl\\_uPY](http://www.newscientist.com/article/dn25018-why-so-munchy-cannabis-shown-to-ramp-up-sense-of-smell.html#.UvjBVvl_uPY)

**06/02/2014**

A man who lost his left hand has been fitted with a prosthesis that has enabled him to feel touch, a technique that has been pioneered using primate research.

[http://www.newscientist.com/article/dn25008-natural-sense-of-touch-restored-with-bionic-hand.html#.UvNVKfl\\_uPY](http://www.newscientist.com/article/dn25008-natural-sense-of-touch-restored-with-bionic-hand.html#.UvNVKfl_uPY)

Adult mice kept in a darkened environment for a week rapidly developed sharper hearing due to changes in brain cell activity.

<http://www.nature.com/news/darkness-sharpens-hearing-in-adult-mice-1.14677>

High-dose vitamin C injections may ease the side-effects of chemotherapy for ovarian cancer according to research using mice, and a small-scale human trial.

<http://www.nature.com/news/vitamin-c-injections-ease-ovarian-cancer-treatments-1.14673>

Nature have two excellent articles about animal research today, one from Alison Abbot that focuses on the difficulties faced by primate researchers in certain parts of Europe, and a second that looks specifically at Italy's new stance on addiction research.

<http://www.nature.com/news/biomedicine-the-changing-face-of-primate-research-1.14645>

<http://www.nature.com/news/animal-farm-1.14660>

#### **05/02/2014**

A gene that affect aggression in fruit flies, and has also been linked to aggression in mammals, could lead to greater understanding of the evolutionary roots of very fundamental behaviours.

<http://www.nytimes.com/2014/02/04/science/to-study-aggression-a-fight-club-for-flies.html?ref=research>

Millions of genetically modified male mosquitos designed to stem the spread of dengue fever are due to be released by Oxford-based biotech firm Oxitec.

<http://www.thetimes.co.uk/tto/science/article3995714.ece>

#### **04/02/2014**

3D images of HIV virus spreading through the intestines of "humanised" mice show how the virus attacks immune cells and spreads through the body.

[http://www.newscientist.com/article/dn24974-first-glimpse-of-how-hiv-swamps-the-guts-immune-cells.html#.UvC3AvI\\_uPY](http://www.newscientist.com/article/dn24974-first-glimpse-of-how-hiv-swamps-the-guts-immune-cells.html#.UvC3AvI_uPY)

An embryonic signal has been discovered in zebrafish that instructs cells to move and reorganise to form the three cell layers that go on to form the basic body plan of all vertebrate animals.

<http://news.harvard.edu/gazette/story/2014/02/on-switches-for-cells/>

Gastric bypass patients can often recover from their type 2 diabetes within days, and now research using pigs has shown that the operation triggers an increase in number and performance of insulin-secreting cells, effectively curing the condition.

[http://www.lunduniversity.lu.se/o.o.i.s?id=24890&news\\_item=6128](http://www.lunduniversity.lu.se/o.o.i.s?id=24890&news_item=6128)

The Daily Beacon, a student newspaper for the University of Tennessee, has interviewed animal researchers and the leaders of opposition groups in order to give their readers an insight into the work that is done, including the ethical review process, and the arguments against.

<http://utdailybeacon.com/news/2014/feb/3/ut-among-demographic-asserting-need-animal-research/>

#### **03/02/2014**

Human stem cells taken from the eyes of dead people have partially restored the sight of blind rats.

<http://www.bbc.co.uk/news/health-25977215>

The strength of a lemur couple's pair bond can be measured by how similar the individuals' scents are, according to researchers from Duke University.

<http://www.dailymail.co.uk/sciencetech/article-2549778/The-smell-success-Is-key-happy-relationship-having-scent-partner.html>

British Heart Foundation researchers have created pulsating heart cells in vitro, using stem cells taken from patients' skin.

<http://www.theguardian.com/science/2014/feb/02/stem-cell-research-heart-disease-long-qt>

**31/01/2014**

Chinese researchers have created the first genetically modified macaques using a "cut and paste" gene manipulation technique.

<http://www.theguardian.com/science/2014/jan/30/genetically-modified-monkeys-cut-and-paste-dna-alzheimers-parkinsons>

Saving Asia's Vultures from Extinction are planning to release 25 critically endangered vultures into the wild in India.

<http://www.bbc.co.uk/news/science-environment-25963100>

US scientists have created the first mouse model for Middle Eastern Respiratory virus, or MERS, the coronavirus from Saudi Arabia that has killed 77 out of 180 people that have contracted it.

<http://www.nature.com/news/biologists-make-first-mouse-model-for-mers-1.14634>

**30/01/2014**

A study using mice has found that two commonly taken antioxidant supplements speed the growth of lung cancers in mice.

<http://www.nature.com/news/antioxidants-speed-cancer-in-mice-1.14606>

Creating stem cells that can transform into any cell in the body from adult stem cells (which can't) can be done by bathing them in acid according to new results using mouse tissue.

<http://news.sciencemag.org/biology/2014/01/acid-treatment-could-provide-breakthrough-stem-cell-technique>

Gut bacteria can positively influence mood and behaviour according to a number of studies using mice, with the absence of bacteria even causing changes in brain structure and function.

[http://www.newscientist.com/article/mg22129530.400-psychobiotics-how-gut-bacteria-mess-with-your-mind.html#.UuofS\\_I\\_uPZ](http://www.newscientist.com/article/mg22129530.400-psychobiotics-how-gut-bacteria-mess-with-your-mind.html#.UuofS_I_uPZ)

As part of the NC3Rs CRACK IT Challenges Competition the organisation has partnered with Alzheimer's Research UK to reduce the numbers of transgenic mice used per year in an area of Alzheimer's disease research.

<http://www.nc3rs.org.uk/news.asp?id=2051>

The Northern Echo have a great piece about the British Heart Foundation's Ramp Up The Red fundraising campaign, which looks at the work the charity is doing and how it is saving lives.

[http://www.thenorthernecho.co.uk/features/health/10966500.Heart\\_of\\_the\\_matter/](http://www.thenorthernecho.co.uk/features/health/10966500.Heart_of_the_matter/)

#### **29/01/2014**

Oxford University have allowed Fergus Walsh from the BBC to film inside their animal research facility, capturing footage of monkeys, mice and ferrets.

<http://www.bbc.co.uk/news/health-25888372>

Links to all the radio and television coverage can be found

here: <http://understandinganimalresearch.org.uk/news/2014/01/bbc-films-inside-oxford-animal-lab/>

Oxford receives further coverage in the Daily Mail, as researchers have identified a region of the brain associated with multi-tasking that is uniquely human, and not found in primates.

<http://www.dailymail.co.uk/sciencetech/article-2547494/Is-multi-tasking-separates-animals-Region-brain-controls-ability-juggle-errands-uniquely-human.html>

Asian elephants are highly endangered, but also extremely dangerous to humans, posing a significant conservation conundrum.

<http://www.newscientist.com/article/dn24957-dangerous-rare-elephants-pose-conservation-conundrum.html#.UujKxfFCUk>

#### **28/01/2014**

Proteins found in semen are known to have numerous complex roles in reproduction beyond the simple delivery of sperm, but new research using mice suggests that their effects extend beyond mating and can even impact upon developing offspring.

<http://www.the-scientist.com/?articles.view/articleNo/39000/title/More-than-Sperm-Support/>

A new mouse model of metastatic prostate cancer is far more accurate than previous models and could lead to far greater insight into the causes of the disease and its progression.

<http://www.sciencedaily.com/releases/2014/01/140124161247.htm>

Vitamin A deficiency is associated with a number of health problems, but now it appears it can also protect mice against parasitic worm infections by boosting their immune response.

<http://www.the-scientist.com/?articles.view/articleNo/38977/title/Vitamin-Deficit-Can-Boost-Innate-Immunity/>

Humans and fruit flies perceive motion in very similar ways according a study that put flies on tiny spherical treadmills (the article contains a video).

<http://news.stanford.edu/news/2014/january/flies-motion-perception-012314.html>

#### **27/01/2014**

A high fat diet during pregnancy can alter a baby's developing brain, according to new research using mice.

<http://www.bbc.co.uk/news/health-25864893>

Sloths only ever descend from the trees to contribute to a communal dung heap, a practise that baffles scientists because it makes them so vulnerable to predation.

<http://www.independent.co.uk/news/science/biologists-solve-the-mystery-of-the-sloths-toilet-habits-9083157.html>

Outfitting dogs with GPS tracking jackets has revealed a system of complex social interactions that are dependent upon the personalities of individual dogs.

<http://www.newscientist.com/article/dn24929-canine-gps-vests-reveal-dog-social-network.html#.UuYvxBBFCUk>

Previously in order to treat wounds or take blood it would be standard practise to drain the manatee's tank and restrain the animal, but now it is apparent that manatees can be trained to hold still for medical examinations, and even roll over on command.

<http://www.smithsonianmag.com/science-nature/new-paradigm-animal-research-let-them-participate-180949471/>

The Brazilian state of Sao Paulo has banned the use of animals in cosmetic testing, with the threat of a \$435,000 fine per animal for first time offenders.

<http://phys.org/news/2014-01-brazil-sao-paulo-state-animal.html>

The EU Commission has denounced Italy for failing to meet to 2010 Directive on Animal Research, and the commissioner is calling for a fine of 150,787 Euros per day if Italy does not begin implementing the Directive.

<http://euranetplus-inside.eu/eu-commission-reprimands-italy-over-animal-testing/>

#### **24/01/2014**

An 11,000 year-old cancer transmitted sexually between dogs has been isolated by scientists from the Wellcome Trust.

<http://www.bbc.co.uk/news/health-25864236>

The Ledger has an editorial covering the on-going activist activity at the University of Florida over animal research.

<http://www.theledger.com/article/20140124/EDIT01/140129504?Title=Animal-Research-Conduct-Programs-Openly&tc=ar#gsc.tab=0>

#### **23/01/2014**

A naturally occurring hormone protects the brains of baby mice from post-natal brain damage caused by a lack of oxygen.

<http://wgbhnews.org/post/growth-factor-heals-damage-preemies-brain-mice>

DNA analysis has led to the discovery of a new species of river dolphin in Brazil, the first since 1918.

<http://www.bbc.co.uk/news/science-environment-25841135>

Dudley the duckling, who lost one of his legs and a sibling in a vicious chicken attack, has been given a new lease of life thanks to a 3D printed prosthetic designed by a local mechanical engineer.

<http://www.dailymail.co.uk/sciencetech/article-2544210/Dudley-duckling-3D-printed-leg-losing-fight-chicken.html>

**22/01/2014**

The proteins produced by gigantic mimiviruses trigger arthritis in mice.

<http://www.newscientist.com/article/dn24900-gigantic-oddball-virus-triggers-arthritis-in-mice.html#.Ut-UfBBFCUk>

Conservation groups have expressed concern at plans to end the endangered species listing of Yellowstone grizzly bears.

<http://www.nature.com/news/yellowstone-grizzlies-face-losing-protected-status-1.14561>

1,557 non-human primates were imported into the UK for research in 2012, according to data released by the Home Office in response to a parliamentary question.

<http://www.telegraph.co.uk/news/politics/10587140/Over-1500-monkeys-are-imported-into-the-UK-for-medical-testing.html>

**21/01/2014**

Energy from the heart has been used to power medical implants in cows, pigs and sheep, through the use of tiny devices that can create power from the natural movements of the organs.

<http://www.newscientist.com/article/dn24906-bendy-implant-harnesses-the-power-of-your-beating-heart.html#.Ut5EQBBFCUk>

Pesticide exposure reduces the size of bumblebees, potentially making them less efficient at foraging for nectar and leading to reduced colony success.

<http://www.theguardian.com/environment/2014/jan/20/pesticides-making-bees-smaller>

Dog walkers in the New Forest are being warned to watch out for sudden lesions on their pets' feet, which could be the first symptoms of "Alabama Rot".

<http://www.bbc.co.uk/news/uk-25820926>

**20/01/2014**

A tiny pipstrelle bat is now known to make an epic 600km migratory journey across the North Sea.

<http://www.bbc.co.uk/nature/25759149>

A colony of 800 ants has arrived on the International Space Station as part of an experiment to see how their behaviour changes in a low gravity environment.

<http://www.independent.co.uk/news/science/houston--we-have-ants-in-space-colony-of-800-arrives-on-international-space-station-9070339.html>

Male black widow spiders 'twerk' according to the *Daily Mail* in order to stop female spiders eating them when they try to mate.

<http://www.dailymail.co.uk/sciencetech/article-2541510/Twerking-life-male-Black-Widow-spiders-vibrate-rear-avoid-eaten-females.html>

The Science Council have published a list of 100 leading practising scientists, which contains UAR council member Professor Max Headley.

<http://www.timeshighereducation.co.uk/news/the-uks-100-leading-practising-scientists/2010580.article>

#### 17/01/2014

A class of drugs currently approved for cancer treatment may be able to clear traumatic memories and experiences from the brain according to new research using mice.

<http://www.nature.com/news/drug-helps-to-clear-traumatic-memories-1.14534>

Around 5000 Australian bees are being fitted with tiny radio tags 2.5 mm square that will allow researchers to monitor their behaviour.

<http://www.newscientist.com/article/dn24883-bijou-backpacks-reveal-habits-of-chilled-out-bees.html#.UtjwthB uPY>

Spiders' webs can actually move to catch prey thanks to their electrical conductivity.

<http://www.thetimes.co.uk/tto/environment/wildlife/article3977651.ece>

#### 16/01/2014

A gene therapy technique developed using mice has been used to restore the sight of patients with genetic vision deterioration.

<http://www.bbc.co.uk/news/health-25718064>

*The Express* reports on the amazing resistance of the naked mole rat to all forms of cancer, and how their anti-cancer mechanisms could benefit humans.

<http://www.express.co.uk/news/health/454188/EXCLUSIVE-Cure-for-ALL-cancers-is-on-the-way-as-scientists-discover-major-breakthrough>

Fitting data loggers to endangered bald ibises has shown researchers from the RVC why birds fly in a V formation.

<http://www.bbc.co.uk/news/science-environment-25736049>

Laser scanning is often used to identify commercially valuable timber in forests, but now it could also be used to identify the best habitats for birds.

<http://sciencenordic.com/scanning-forest-birds>

**15/01/2014**

David Shukman reports for the BBC that China is cloning animals on an industrial scale for the testing of new medicines.

<http://www.bbc.co.uk/news/science-environment-25576718>

Sex could increase long-term memory and even restore age-related brain decline according to new research using rats.

<http://www.telegraph.co.uk/science/science-news/10571322/Can-sex-make-you-smarter.html>

Scientists at Queen's University Belfast are working with the Irish Equine Centre to develop new tests for doping in horses and cattle.

<http://www.belfasttelegraph.co.uk/news/local-national/northern-ireland/scientists-work-on-new-animal-doping-test-29917431.html>

The Conversation asks why invertebrates, with the exception of cephalopods, are excluded from the legislation protecting research animals in Australia.

<http://theconversation.com/when-is-an-animal-not-an-animal-research-ethics-draws-the-line-21756>

**14/01/2014**

Nanoparticles that mimic red blood cells could form the base of vaccinations against diseases like MRSA, according to new research using mice.

[http://www.nanomagazine.co.uk/index.php?option=com\\_content&view=article&id=2345:nanoparticle-that-mimics-red-blood-cell-shows-promise-as-vaccine-for-bacterial-infections&catid=38&Itemid=159](http://www.nanomagazine.co.uk/index.php?option=com_content&view=article&id=2345:nanoparticle-that-mimics-red-blood-cell-shows-promise-as-vaccine-for-bacterial-infections&catid=38&Itemid=159)

Professor Pirmohamed from the MRC Centre for Drug Safety has spoken to BBC Suffolk on why drug side effects occur, how we can improve our ability to detect rare side effects, and how the risks posed by side effects can be reduced.

<http://www.bbc.co.uk/programmes/p01nph3g> (listen from 02.22.40)

Female capuchin monkeys have been filmed throwing stones at potential mates in order to attract their attention.

<http://www.bbc.co.uk/nature/25667268>

Primates have a sluggish metabolism that contributes to their lengthy lifespans, according to a new study of Lincoln Park zoo inhabitants.

[http://www.newscientist.com/article/dn24858-slugish-metabolisms-are-key-to-primates-long-lives.html#.UtUEJp5\\_spk](http://www.newscientist.com/article/dn24858-slugish-metabolisms-are-key-to-primates-long-lives.html#.UtUEJp5_spk)

Further analysis of the Tiktaalik fossil, a 375m-year-old aquatic animal that could be the "missing link" between life in the water and life on land, has been published showing that the animal had strong back legs allowing it to both swim and walk on land.

<http://www.theguardian.com/science/2014/jan/13/tiktaalik-fossil-fish-four-legged-land-animal>

**13/01/2014**

A womb transplant operation pioneered in animals including mice, sheep and baboons has now been used to give nine Swedish women the chance to become pregnant.

<http://www.theguardian.com/society/2014/jan/13/womb-transplants-success-swedish-project>

The eggs of tiny aquatic animals that had been lying dormant on the bottom of a lake for 700 years have been successfully hatched, making them the oldest animals ever to be resurrected.

[http://www.nytimes.com/2014/01/09/science/a-living-time-capsule-shows-the-human-mark-on-evolution.html?\\_r=1](http://www.nytimes.com/2014/01/09/science/a-living-time-capsule-shows-the-human-mark-on-evolution.html?_r=1)

African tiger fish have been filmed catching swallows in flight, catching the birds as they skim over the surface of the lake.

<http://www.bbc.co.uk/nature/25681465>

**10/01/2014**

The red-necked phalarope makes a spectacular 16,000 mile round trip when migrating, taking in Canada, the Caribbean and South America before returning to the UK, which RSPB researchers have described as completely illogical.

<http://www.thetimes.co.uk/tto/environment/wildlife/article3970771.ece>

Three quarters of the world's big carnivores are in decline according to a new study. Habitat loss as well as unfortunate persecution by humans has created "global hotspots of decline".

<http://www.bbc.co.uk/news/science-environment-25675002>

**09/01/2014**

A "medical superglue" developed in the US can seal cardiac defects in pigs in seconds, and can withstand the forces inside a pumping heart.

<http://www.bbc.co.uk/news/health-25641030>

Researchers have been able to accurately measure the ages of great white sharks for the first time, thanks to radioactive fallout from nuclear bomb tests in the 50s and 60s.

<http://www.bbc.co.uk/news/science-environment-25655666>

Biofluorescence, the ability to absorb light and reemit it at a different wavelength, is more widespread among fish than previously thought.

<http://www.nature.com/news/fish-flaunt-neon-glow-1.14488>

The elephant shark has become the most primitive jawed vertebrate to have its entire genome sequenced.

<http://www.nature.com/news/why-sharks-have-no-bones-1.14487>

Times Higher Education has conducted an investigation into University Freedom of Information Request responses, by examining how many FOI requests were received, how many were refused, and for what reasons.

<http://www.timeshighereducation.co.uk/news/universities-freedom-of-information-responses-vary/2010318.article>

#### **08/01/2014**

A protein metabolite produced by the muscles during exercise could increase metabolism and potentially protect against diabetes according to new research in mice.

<http://www.thetimes.co.uk/tto/health/news/article3968682.ece>

Starfish have simple compound eyes on the end of each arm, but because they lack a brain it has been difficult to determine how or indeed if they can see.

<http://news.nationalgeographic.com/news/2014/01/140107-starfish-sea-star-eyes-coral-reef-ocean-animal-science/>

In spite of widespread adoption of the ARRIVE Guidelines by research journals, including those from Nature Publishing Group and PLOS, research published today in PLOS Biology suggests that the guidelines have had little impact on the quality of reporting for animal research.

<http://blogs.nature.com/news/2014/01/even-after-prodding-animal-researchers-omit-key-details.html>

#### **07/01/2014**

Drugs containing synthetic cannabinoids could have significant pain relieving potential for osteoarthritis according to new research that used both human tissue samples and mice.

<http://www.arthritisresearchuk.org/news/press-releases/2014/january/drugs-related-to-cannabis-have-pain-relieving-potential-for-osteoarthritis.aspx>

Nanoparticles coated in a cancer-killing protein called Trail can kill migrating cancer cells in the bloodstream of mice, preventing cancer from spreading throughout the body.

<http://www.bbc.co.uk/news/health-25625934>

The OpenWorm project is attempting to create an accurate computer model of the nematode worm, an animal widely used for biological research.

<http://www.gizmag.com/openworm-nematode-roundworm-simulation-artificial-life/30296/>

#### **06/01/2014**

Studies in mice, infant macaques and human tissue cultures have hinted at a link between schizophrenia and rogue elements of DNA known as "jumping genes".

<http://news.sciencemag.org/biology/2014/01/jumping-genes-linked-schizophrenia>

Inflammation in the lungs, a common symptom of asthma, could be reduced by a high fibre diet according to new observations in mice.

<http://www.bbc.co.uk/news/health-25592214>

A mouse cancer model has been used to show that inhibiting the activity of a specific protein could completely eradicate a deadly form of soft tissue cancer.

<http://www.utsouthwestern.edu/newsroom/news-releases/year-2013/dec/mpnst-le.html>

The dry but sticky feet of the gecko, which allow the reptile to scale vertical surfaces and hang upside down with ease, have inspired a new kind of robot that could one day be used to crawl around orbiting spacecraft.

<http://www.newscientist.com/article/dn24808-gecko-feet-will-let-robot-minions-fix-space-stations.html#.Usp4lvRdUpk>

Dr Michael Goldberg, professor of neurology and neuroscience at Columbia University, has written a short piece for the Wisconsin State Journal defending the use of animals in research.

[http://host.madison.com/wsj/news/opinion/mailbag/animal-research-key-to-advancing-science----dr/article\\_89a888cf-9c47-5be0-a056-16da96118aab.html](http://host.madison.com/wsj/news/opinion/mailbag/animal-research-key-to-advancing-science----dr/article_89a888cf-9c47-5be0-a056-16da96118aab.html)

#### **03/01/2014**

The BBC reports from Tokyo on researchers creating chimeric pigs that could one day be used to grow human organs.

<http://www.bbc.co.uk/news/science-environment-25584031>

Time reports on glow-in-the-dark pigs which were created by injecting DNA encoding a fluorescent protein into pig embryos.

<http://newsfeed.time.com/2013/12/30/scientists-create-glow-in-the-dark-pigs-just-in-time-for-your-next-rave/#ixzz2pG15lqmJ>

Conservationists are concerned about the survival of the native birds in the Galapagos islands in the face of avian malaria outbreaks.

<http://www.bbc.co.uk/news/science-environment-25430997>

There is a significant amount of plastic debris sitting at the bottom of rivers, which can have highly damaging effects upon marine life.

<http://www.telegraph.co.uk/earth/wildlife/10547684/Plastic-litter-threatens-river-life.html>

#### **02/01/2014**

A new study has shown that high doses of vitamin E help to slow the progress of Alzheimer's disease in animal models.

<http://www.bbc.co.uk/news/health-25552768>

Alison Wollard who gave the 2013 Royal Institution Christmas Lectures has written a summary of some of the discoveries we have made and have yet to make through studying some unusual animals including jellyfish, worms, cave fish and salamanders.

<http://www.bbc.co.uk/nature/25430552>

Dolphins are thought to be getting high by carefully chewing a certain kind of puffer fish, which they pass between each other.

<http://www.independent.co.uk/environment/nature/dolphins-deliberately-get-high-on-puffer-fish-nerve-toxins-by-carefully-chewing-and-passing-them-around-9030126.html>