

News feed archive April – June 2014

30/06/2014

Running helped mice to recover from amblyopia, a type of blindness caused by sensory deprivation early in life.

<http://www.nature.com/news/running-cures-blind-mice-1.15476>

Supercooling organs can increase the length of time that they remain viable for donation, according to research using rat livers.

<http://www.bbc.co.uk/news/health-28061265>

In Africa there are concerns that local strains of malaria have evolved resistance to artemisinin, one of the last drugs that is completely effective against the parasite.

http://www.newscientist.com/article/dn25813-threatwatch-top-malaria-drug-may-lose-punch-in-africa.html#.U7EIA_IdWPY

27/06/2014

A new vaccine developed by researchers in Germany boosts the immune system to protect against brain tumours in mice.

<http://www.bbc.co.uk/news/health-28013585>

Scientists have been able to induce disease in human heart tissue, cultured in vitro.

<http://www.dailymail.co.uk/sciencetech/article-2669350/Beating-human-hearts-grown-lab-Tiny-organs-infected-disease-test-pioneering-drugs.html>

Different species of Guenon monkey will produce infertile offspring if they mate by accident, and this has led to numerous facial adaptations to enable those from the same species to recognise each other.

<http://news.sciencemag.org/plants-animals/2014/06/monkey-s-face-says-don-t-mate-me>

Following a controversial American study claiming that sunbathing might be 'addictive' in mice, Dr Clare Stanford from UCL has written a letter to the Times arguing that "We can't allow studies that appear frivolous or unethical to undermine public support for using animals when we are researching genuinely serious medical conditions, such as stroke, tuberculosis and schizophrenia."

<http://www.thetimes.co.uk/tto/opinion/thunderer/article4130286.ece>

25/06/2014

A microchip implanted into the brain of a paralysed man has enabled him to move his hand, by translating his thoughts into electrical stimulations.

<http://www.independent.co.uk/news/science/a-medical-first-quadruplegic-man-controls-arm-using-a-chip-implanted-in-his-brain-9561255.html>

A controversial study that linked genetically-modified corn with cancer in rats has been republished in

an open access journal after extensive criticism from the scientific community prompted the original publishers to forcibly withdraw the study.

<http://www.theguardian.com/environment/2014/jun/24/controversial-seralini-study-gm-cancer-rats-republished>

Atlantic cod have been found to contain substances more commonly found in skincare products.

<http://sciencenordic.com/traces-skin-lotion-found-atlantic-cod>

A woman in Scotland is to become the first recipient of a double hand transplant, after her own hands were amputated after a pneumonia infection.

<http://www.bbc.co.uk/news/uk-scotland-27999349>

23/06/2014

An American study claims to have found evidence of addiction to UV radiation in mice, suggesting that sunbathing could cause a surge of 'feelgood' hormones. However a number of UK researchers have raised concerns about the study, focusing on the translation of these findings in mice to humans, and the welfare of the animals involved in the study.

<http://www.thetimes.co.uk/tto/health/news/article4124496.ece>

Mice exposed to stressful situations, including tilting their cages, alternating light with darkness and switching mice between isolation and crowded quarters, have increased levels of immune levels in their blood that can cause symptoms similar to those of atherosclerosis.

<http://news.sciencemag.org/biology/2014/06/how-stress-can-clog-your-arteries>

Contrary to popular medical opinion, the human kidney is able to regenerate itself according to research using genetically modified mice.

<http://www.timesofisrael.com/discovery-could-spare-patients-from-kidney-transplant/>

18/06/2014

A drug developed a century ago to treat African sleeping sickness has eliminated the symptoms of autism from adult mice with an experimental form of the disorder.

<http://news.sciencemag.org/biology/2014/06/century-old-drug-reverses-signs-autism-mice>

A common childhood leukaemia can be cured in mice by reactivating a tumour suppressor gene that is often damaged or only partially present in children with the disease.

<http://www.theguardian.com/science/2014/jun/18/leukaemia-researchers-find-genetic-switch-to-repair-cancer-cells-in-mice>

Misplaced genes in mice have added further weight to the evidence against the existence of STAP stem cells, which were reported in Nature earlier this year.

<http://www.nature.com/news/gene-tests-suggest-acid-bath-stem-cells-never-existed-1.15425>

17/06/2014

A brain chemical that appears to play a central role in memory loss has been identified in both human patients and mice.

<http://www.thetimes.co.uk/tto/health/news/article4119059.ece>

16/06/2014

Professor Colin Blakemore, who has in the past been the target of animal rights extremists for his vision research involving cats, has been awarded a knighthood in the Queen's birthday honours list.

<http://www.independent.co.uk/news/uk/home-news/professor-colin-blakemore-honoured-10-years-after-being-denied-knighthood-9536139.html>

The UK's domestic cat population is increasingly suffering from the 'lifestyle' diseases that affect their human owners, and so much so that the first feline diabetes clinic has recently opened in Hertfordshire.

<http://www.dailymail.co.uk/sciencetech/article-2658433/Real-fat-cats-Britains-tabbies-getting-tubby-diabetes-clinic.html>

13/06/2014

Crayfish may be able to feel anxiety, adding to a number of studies that suggest the animals might also be able to feel pain.

<http://www.bbc.co.uk/news/science-environment-27812367>

Scientist Michael Levin studies how animals like lizards and tadpoles can regenerate lost limbs by studying bioelectric signals.

<http://www.newscientist.com/article/mg22229710.300-im-cracking-the-code-to-regrow-human-limbs.html>

12/06/2014

Suncream may delay the onset of melanoma, but it cannot completely prevent it according to new research using mice.

<http://www.theguardian.com/science/2014/jun/12/skin-cancer-sun-cream-factor-research>

More mouse research has revealed that drugs already licensed to treat leukaemia could prove effective against other forms of cancer.

<http://www.dailymail.co.uk/health/article-2655793/Pill-used-treat-leukaemia-used-beat-cancers-stop-deadly-disease-returning.html>

Harmless scarlet kingsnakes in North Carolina are continuing to mimic the venomous coral snake, even though the coral snake has been extinct in the region for more than 50 years.

<http://www.nature.com/news/snakes-mimic-extinct-species-to-avoid-predators-1.15397>

11/06/2014

Exposure to fine particulate pollution during the early stages of post natal development has been linked to brain abnormalities in mice that are consistent with schizophrenia and autism in humans.

<http://www.independent.co.uk/news/science/air-pollution-linked-to-autism-and-schizophrenia-9524414.html>

Scientific experiments on the International Space Station, including the delivery of a rodent habitat capable of housing 40 mice, are ramping up in advance of the end of the space station's operation in 2024.

<http://www.nature.com/news/space-station-science-ramps-up-1.15388>

Light sensitive retinal cells have been successfully grown in vitro using stem cells – an ‘eye-in-a-dish’.

<http://www.dailymail.co.uk/sciencetech/article-2654175/Scientists-create-eye-dish-Light-sensitive-retina-produced-using-stem-cells-one-day-help-blind-regain-sight.html>

10/06/2014

The world’s smallest pacemaker has been successfully implanted into a person’s heart via a catheter inserted into the leg.

<http://www.bbc.co.uk/news/uk-england-hampshire-27763063>

Oxytocin, the so-called “love hormone” has the same effect on dogs as it has on humans, and researchers have argued that the hormone is key in forming and maintaining social bonds.

<http://news.sciencemag.org/brain-behavior/2014/06/love-hormone-has-same-effect-humans-and-dogs>

09/06/2014

A study of mice and humans over six months has shown that fasting for three days can clean up the immune system, removing old, damaged cells and triggering the growth of new ones.

<http://www.independent.co.uk/news/science/fasting-for-two-days-could-regenerate-the-immune-system-according-to-research-9506168.html>

Rats are capable of feeling regret about their decisions, according to a study in which rats had the option to take food of unknown quality instead of waiting for the food initially offered.

<http://www.independent.co.uk/news/science/rats-are-capable-of-feeling-regret-scientists-say-9510038.html>

05/06/2014

The genome of the blind mole rat, a burrowing rodent that can live for around 20 years, has been sequenced for the first time.

<http://www.bbc.co.uk/news/science-environment-27684001>

Nature has a fascinating feature about the history of research into a genetic risk factor for Alzheimer’s disease, which has featured the work of a number of mouse geneticists.

<http://www.nature.com/news/alzheimer-s-disease-the-forgetting-gene-1.15342>

Dr Obaro Evuarherhe writes for Suzi Gage’s Guardian science blog in response to recent articles in the Daily Mail and other tabloids about animal research, and the importance of approaching discussions about animals research with as much objectivity as possible.

<http://www.theguardian.com/science/sifting-the-evidence/2014/jun/05/animal-research-cuteness-kittens>

04/06/2014

Thermal cameras have revealed that koalas hug trees in order to cool down during hotter weather.

<http://www.bbc.co.uk/news/science-environment-27684863>

Professor Paul Workman from the Institute of Cancer Research has written a blog post about the

Concordat, which the Institute has recently signed.

<https://drugdiscoverer.wordpress.com/2014/06/03/being-open-about-animal-research/>

03/06/2013

Early results from phase I clinical trials of immunotherapy drugs to treat advanced melanoma have shown marked improvements in lifespan of patients.

<http://www.bbc.co.uk/news/health-27674658>

Researchers have erased and reactivated memories in rats, altering the animals' reaction to past events.

<http://www.sciencedaily.com/releases/2014/06/140601150633.htm>

Crickets on separate Hawaiian islands have independently evolved to become mute, in order to avoid a parasitic fly that is attracted by their chirping.

http://www.nytimes.com/2014/06/03/science/on-separate-islands-crickets-go-silent.html?_r=0

30/05/2013

A veterinary painkiller that decimated vulture populations across Asia has been found to affect eagles, and its use has just been approved for use in Spain and Italy, home to some of Europe's largest eagle populations.

<http://www.newscientist.com/article/dn25650-europes-eagles-under-threat-from-vulturekilling-drug.html#.U4hGvvdWPY>

Delivering electrical stimulation to the 'reward centre' of the brain in macaque monkeys can control the animals' decision-making.

<http://www.thetimes.co.uk/tto/science/article4103773.ece>

29/05/2014

An ebola vaccine for chimpanzees that could prevent the decimation of wild populations may never be used because researchers cannot test the drug using captive animals.

<http://www.newscientist.com/article/dn25640-ebola-vaccine-for-chimps-works-but-may-never-be-used.html#.U4b5EPldWPY>

Mouse studies have pinpointed a series of neurones involved in coping with stress.

<http://www.nature.com/news/depressed-mice-have-excitabile-neurons-1.15305>

The Mirror was recently given full access to the animal research facility at King's College London, during which they were able to see marmoset monkeys involved in Parkinson's research.

<http://www.mirror.co.uk/news/uk-news/see-inside-monkey-testing-centre-3618664>

28/05/2014

Having a big brain may have led to humans being physically weaker than their primate relatives, according to new research that compared chimpanzees, macaques and humans.

<http://news.sciencemag.org/biology/2014/05/did-big-brains-sap-our-strength>

Widespread use of antibiotics on farms has been condemned by a meeting of the World Organisation for Animal Health as contributing significantly to the growing problem of antibiotic resistance.

<http://www.bbc.co.uk/news/science-environment-27541663>

27/05/2014

Doctors in Maryland and Pennsylvania hospitals are preparing for clinical trials of a 'suspended animation' therapy to treat serious stab wounds, a technique that was pioneered using pigs.

<http://www.dailymail.co.uk/sciencetech/article-2639752/Left-life-death-First-suspended-animation-trials-set-begin-bid-buy-time-stabbing-gunshot-victims.html>

Health complications resulting from HIV infection have been dramatically reduced in monkeys through treatment with an existing drug already used to treat kidney disease.

<http://www.newscientist.com/article/dn25614-fixing-leaks-in-the-gut-may-stall-progression-of-hiv.html#.U4Rz7PldWPZ>

Cutting calorie intake may aid breast cancer recovery, and following research using mice the technique is now being trialled on female patients.

<http://www.thetimes.co.uk/tto/health/news/article4100372.ece>

A commonly available MS drug appears to cause 'memory extinction' of previous experiences that had caused pain in mice.

<http://www.thetimes.co.uk/tto/science/article4100383.ece>

23/05/2015

A protein produced by human children that are immune to malaria has successfully protected mice against some of the most lethal strains of the parasite.

<http://www.independent.co.uk/news/science/high-hopes-for-new-malaria-vaccine-based-on-blood-protein-9420800.html>

Chickens have the ability to regrow sound-detecting cells within their inner ears after hearing loss.

<http://www.dailymail.co.uk/sciencetech/article-2636540/Could-chickens-cure-DEAFNESS-Study-reveals-birds-regrow-damaged-hearing-cells.html>

Keepers at London Zoo have been surprised by the birth of the institutions first baby two-toed sloth.

<http://www.dailymail.co.uk/sciencetech/article-2636939/A-baby-sloths-hit-quickly-Keepers-shock-pair->

[produce-baby-London-Zoo.html](#)

Mice lacking a particular pain receptor live for longer and have a more youthful metabolism than normal mice, hinting at new targets for efforts to improve metabolic health and lifespan in humans.

<http://www.newscientist.com/article/dn25616-lifespan-boost-for-mice-that-feel-less-pain.html#.U38MKvldWPY>

21/05/2015

Switching off a key protein present in pancreatic cells reduces the spread of pancreatic cancer in both mice and human cancer samples.

<http://www.thetimes.co.uk/tto/science/article4095811.ece>

It appears that even in the wild, mice will run in wheels, a behaviour previously thought to be exclusive to captive rodents.

<http://news.sciencemag.org/biology/2014/05/even-wild-mice-run-wheels>

20/05/2015

Spinal cord stimulation has restored movement to the limbs of paralysed monkeys.

<http://news.sky.com/story/1264943/scientists-paralysed-hands-could-move-again>

A wirelessly charged pacemaker has been successfully implanted into a rabbit, removing the need for further operations to change the batteries.

<http://www.newscientist.com/article/dn25590-wireless-energy-powers-pacemaker-in-live-rabbit.html#.U3shCvldWPY>

19/05/2014

Of the six potential challenges for the Longitude Prize, two in particular are likely to involve animal research: 'How can we prevent the rise of resistance to antibiotics?' and 'How can we help people with dementia to live independently for longer?'

<http://www.bbc.co.uk/news/science-environment-27443825>

Thousands of sheep in Australia are believed to have died after eating a poisonous plant, misleadingly named the Darling Pea, that makes them act drunk and hit their heads on posts until they die.

<http://www.independent.co.uk/news/world/australasia/thousands-of-sheep-in-australia-die-from-banging-their-heads-till-they-crack-open-after-eating-poisonous-plant-9392432.html>

16/05/2014

A stem cell treatment has helped mice with multiple sclerosis to walk again.

<http://www.independent.co.uk/news/science/mice-crippled-with-ms-are-made-to-walk-again-with->

[breakthrough-cure-9380741.html](#)

"Heavy" mice are helping researchers to reduce the rejection rate for lab grown tissues.

<http://www.newscientist.com/article/dn25577-heavy-mice-may-reveal-why-soft-tissues-turn-to-bone.html#.U3Xe2vldUhM>

15/05/2014

Treatment with a common antidepressant reduces the production of Alzheimer's protein amyloid beta in both mice and human patients.

<http://www.thetimes.co.uk/tto/science/article4089901.ece>

New drugs that could protect the gut against radiation damage have been developed using mice.

<http://www.nature.com/news/wanted-cure-for-fatal-effects-of-radiation-1.15225>

14/05/2014

The Concordat on Openness on Animal Research in the UK launched today, receiving a wide range of press coverage including:

Guardian: <http://www.theguardian.com/world/2014/may/14/companies-vow-to-be-more-transparent-on-animal-testing>

Daily Mail: <http://www.dailymail.co.uk/news/article-2627624/Rap-Body-Shop-Lush-ethics-claims-Shops-criticised-implying-cosmetics-tested-animals-despite-ban-introduced-year.html>

Nature: <http://www.nature.com/news/uk-institutions-sign-up-to-animal-research-openness-1.15222>

Glowing "space mice" can show how nanoparticles move around the body and where they accumulate.

<http://www.newscientist.com/article/dn25562-glowing-space-mice-show-where-quantum-dots-lodge.html#.U3Mx5fldWPY>

09/05/2014

The brains of both mice and patients with multiple sclerosis have shed light on why women are more susceptible to the disease than men.

<http://www.bbc.co.uk/news/health-27323472>

Seven years ago dozens of children with progeria, a very rare genetic disease that causes symptoms resembling premature ageing, began receiving an experimental drug called lonafarnib that was developed using mice. Now a study by the Progeria Research Foundation suggests that this drug can prolong the children's lifespans on average by 19 months.

<http://news.sciencemag.org/biology/2014/05/unorthodox-study-claims-drug-prolongs-lives-children-premature-aging-disease>

Studying the genome of the polar bear has revealed how these animals deal with their high fat diets without any ill effects.

<http://www.independent.co.uk/news/science/scientists-investigate-why-obesity-is-good-for-polar-bears-9340064.html>

A chimpanzee 'war' caused by fragmentation of a social group has provided extensive data on how societies fall apart.

<http://www.newscientist.com/article/mg22229682.600-only-known-chimp-war-reveals-how-societies-splinter.html#.U2tMUPldWPY>

Alison Abbot writes for the Nature news blog about Andreas Kreiter, a German researcher who has become the subject of an advertising campaign by a German anti-vivisection organisation.

<http://blogs.nature.com/news/2014/05/german-research-agencies-condemn-animal-rights-attack-on-neuroscientist.html>

Electromagnetic radiation from sources mobile devices, radios and power lines could disrupt a bird's ability to navigate.

<http://news.sciencemag.org/biology/2014/05/electronic-smog-disorients-european-robins>

07/05/2014

Chimpanzees have very similar personality traits to humans, with similar fundamental neurobiology, enabling researchers to use them as a model of human personality processes.

<http://www.dailymail.co.uk/sciencetech/article-2621829/Getting-personal-primates-Researchers-Chimpanzees-personalities-identical-humans.html>

Neurogrid, a circuit board modelled on the human brain, can simulate one million neurons and billions of synapses and is around 9,000 times faster than a typical computer.

<http://www.independent.co.uk/news/science/human-brain-circuit-board-works-9000-times-faster-than-a-pc-9320702.html>

A 3D printed human heart could be implanted into a patient within the decade, according to Dr Stuart Williams of Louisville, Kentucky.

<http://www.thetimes.co.uk/tto/health/news/article4082688.ece>

06/05/2014

Blood plasma from young mice appears to 'recharge' the brains of older mice.

<http://www.bbc.co.uk/news/health-27282832>

A human baby born with two holes in his heart has had them repaired using tissue taken from a cow

heart.

<http://www.dailymail.co.uk/health/article-2618739/Baby-boy-saved-COW-heart-Animal-tissue-used-patch-holes-heart.html>

Cotton balls dipped in insecticide are enabling Darwin's finches to fix their own problems with parasites.

<http://www.nature.com/news/cotton-balls-help-darwin-s-finches-to-help-themselves-1.15142>

Terry Wheeler, Director of McGill University's Entomological Museum, defends a different kind of animal research in New Scientist: collecting specimens for museum collections.

<http://www.newscientist.com/article/mg22229670.200-killing-animals-is-a-necessary-evil-for-natural-history.html#.U2isnflfWPY>

02/05/2014

Nature and The Times have both covered the launch of the Home Office consultation concerning its proposed changes to Section 24.

Nature: <http://www.nature.com/news/uk-proposes-greater-transparency-on-animal-research-1.15143>

The Times: http://www.thetimes.co.uk/tto/science/article4078687.ece?CMP=OTH-gnws-standard-2014_05_01

The New York Times blog discusses new Chinese legislation that would prompt a move away from regulatory testing of cosmetics on animals for the Chinese market.

http://sinosphere.blogs.nytimes.com/2014/05/02/interest-grows-in-animal-testing-alternatives/?_php=true&_type=blogs&_r=0

Dr John Paul Gosling from the University of Leeds discusses the benefits and shortcomings of mathematical models for making toxicological safety assessments on the NC3Rs blog.

<http://blog.nc3rs.org.uk/how-do-we-boost-confidence-in-using-mathematical-modelling-for-toxicological-safety-assessments/>

01/05/2014

Damaged monkey hearts can be repaired by an injection of stem cells, paving the way for a human trial before the end of the decade.

<http://www.theguardian.com/science/2014/apr/30/stem-cell-treatment-damaged-hearts-monkeys>

Five human patients with leg injuries have had damaged muscle regrown using tissue from pigs.

<http://www.thetimes.co.uk/tto/health/news/article4077384.ece>

Bird species living in and around the Chernobyl exclusion zone have adapted to the radiation, showing increased levels of antioxidants and reduced DNA damage.

<http://www.independent.co.uk/news/science/birds-living-in-chernobyls-shadow-are-adapting-to-the-radiation-say-scientists-9306662.html>

Implanting a tiny microscope into a rat could allow for detailed monitoring of disease progression while reducing the number of animals needed for research.

<http://www.heraldsotland.com/news/home-news/bionic-rat-to-reduce-animal-testing-lab-deaths.24099559>

Times Higher Education has an excellent feature article detailing the recent history of animal research in the UK; how extremists were able to silence institutions and scientists from speaking about the work that they do, and how openness in the sector is gradually increasing.

<http://www.timeshighereducation.co.uk/features/feature-why-animal-researchers-are-ending-their-silence/2012957.fullarticle>

30/04/2014

Researchers in Beijing have managed to use liquid metal to reconnect severed sciatic nerves in a bullfrog.

<http://www.dailymail.co.uk/sciencetech/article-2615762/Terminator-style-LIQUID-METAL-used-reconnect-severed-nerves-animals.html>

Saudi Arabia's health minister has warned Saudis to avoid close contact with camels to avoid contracting MERS.

http://www.newscientist.com/article/dn25489-avoid-camels-to-escape-mers-warns-saudi-minister.html#.U2C_-vldWPY

High fibre diets have long been known to combat obesity, and now new research using mice suggests that fibre in the diet can directly affect the part of the brain that regulates appetite.

<http://www.nature.com/news/dietary-fibre-acts-on-brain-to-suppress-appetite-1.15127>

29/04/2014

Rats and mice show increased stress levels when handled by men rather than women, according to a new study from McGill University in the USA.

<http://www.nature.com/news/male-researchers-stress-out-rodents-1.15106>

This story has received widespread coverage in the press today, including an excellent blog piece for the Telegraph by Tom Chivers, which examines the importance of animals to scientific research.

<http://blogs.telegraph.co.uk/news/tomchiversscience/100269353/animal-testing-mans-reliance-on-rodents-knows-no-bounds/>

The hearts of genetically modified pigs, designed to be more compatible with humans, have been successfully transplanted into baboons in promising research that could translate to humans.

<http://www.telegraph.co.uk/science/science-news/10793958/Pig-hearts-could-be-transplanted-into-humans-after-baboon-success.html>

Half of people diagnosed with cancer will now survive in the long-term, and according to Cancer Research UK the disease is on its way to becoming a chronic condition that people live with rather than a death sentence.

<http://www.thetimes.co.uk/tto/health/news/article4075509.ece>

Five grants co-funded by the NC3Rs and the Engineering and Physical Sciences Research Council aim to improve imaging techniques with a view to reducing the numbers of animals in research.

<http://www.nc3rs.org.uk/news.asp?id=2085>

17/04/2014

Scientists have discovered the protein on the surface of egg cells that allow it to bind to sperm and trigger fertilisation. The equivalent in sperm had been discovered in 2005, and it has taken nearly a decade to find its counterpart. The newly discovered protein, named Juno, was found through experiments in cell cultures and the results were confirmed in GM mice which could not produce Juno and were infertile as a result.

<http://www.theguardian.com/science/2014/apr/16/fertility-mystery-solved-protein-discovered-joins-sperm-eggs>

A powerful antiviral drug, which is hoped to treat measles, has shown successful results in a large mammal for the first time. Since measles only affects primates, the drug was trialed in ferrets infected with canine distemper virus. When the drug was given within 3 days of infection, the virus was cleared and the ferrets were left with immunity against future infections. It is hoped that this could be used to stem outbreaks of measles, but first it will be trialed in squirrel monkeys.

<http://www.newscientist.com/article/dn25432-will-an-antiviral-drug-put-paid-to-measles.html#.U0-gvfldWjM>

16/04/2014

A study in mice and rats have shown that a pneumonia infection “profoundly exacerbated” brain injury from a stroke. The infection appear to trigger inflammation, which worsens the damage caused by stroke. This has provided further evidence of the need for anti-inflammatories for stroke patients and clinical trials are due to start soon.

<http://www.sciencedaily.com/releases/2014/04/140415084150.htm>

Low doses of sugar over 6 months reduces the chance of successful development of fertilised eggs in rhesus macaques. The dose of sugar given to the monkeys was half that consumed by the average US woman, yet only 19% of their eggs developed compared to 86% in the control group. This is one of the first studies to link sugar consumption to disrupted ovarian function in healthy animals.

<http://www.medpagetoday.com/Endocrinology/GeneralEndocrinology/45260>

Research into zebra finches at St Andrews has shown that birds do not rely solely on an innate

genetic template for building a nest, but can learn to choose the best building materials. The researchers tested the birds to see if they could learn to differentiate between materials based on their properties by comparing different strengths of string.

<http://www.bbc.co.uk/news/science-environment-27040636>

15/04/2014

Two new mouse models of Alzheimer's disease have been developed in Japan. The mice have been genetically modified to replicate mutations found in two cases of familial Alzheimer's. The researchers behind the work say that these mice more closely match the progression of the disease in humans than previous models, and this could help to better understand the development of amyloid-beta deposits in the brain.

<http://www.sciencedaily.com/releases/2014/04/140413154050.htm>

China is introducing new regulations to improve animal welfare at its animal facilities. New regulations will require an ethical review by a committee of four experts in lab-animal science and one layperson - putting Chinese regulation more in line with Western laws. The revised regulations are expected within 12 months. According to the Chinese Ministry of Science and Technology, around 12 million animals, mostly mice, are used in scientific research each year.

<http://english.peopledaily.com.cn/90882/8598100.html>

14/04/2014

Research in mice has uncovered a mechanism for epigenetic inheritance, where experiences and stresses from one generation are passed on to the next through changes in DNA. This has been an area of much speculation as epigenetic changes were thought to be wiped clean in sperm and therefore could not be passed on. The latest research has discovered an excess of small fragments of RNA in the mice's sperm, which could be the way these changes are inherited.

<http://www.newscientist.com/article/dn25408-are-rna-fragments-making-gene-tweaks-in-descendants.html#.U0uknflDXIc>

A major breakthrough in hepatitis C treatment has been reported, with 90% of patients cured within 12 weeks. Existing treatments only work half the time, have serious side effects and require a year of injections. The new oral drug was highly effective in the trial patients, who all had liver cirrhosis, but the study did not show if it improved liver health or reduced the risk of liver cancer.

<http://www.bbc.co.uk/news/health-26987653>

Dr John Moore-Gillon from the British Lung Foundation has called for insurance companies to fund research into mesothelioma - a type of lung cancer caused by asbestos exposure. The cancer, which can take decades to develop and only months to kill, is expected to cause 60,000 deaths in the next 30 years and potentially cost the insurance industry £11bn. Dr Moore-Gillon claims that even 0.05% of this money could transform mesothelioma research, ultimately saving money and lives.

<http://www.bbc.co.uk/news/health-26986117>

11/04/2014

Vaginas grown in vitro using human cells have been successfully implanted into human recipients, in a procedure developed using rabbits. The surgery was carried out on four women who were born without vaginal canals due to a rare condition. These women were teenagers when they were operated on, and the Wake Forest Medical Centre in North Carolina, where the surgery was conducted, waited four to eight years before publishing the results to be sure there were no long-term complications.

<http://www.newscientist.com/article/dn25399-engineered-vaginas-grown-in-women-for-the-first-time.html#.U0ekMvldWPY>

High speed videos have revealed that fruit flies can manoeuvre like a fighter jet. Subtle wing movements enable the insects to bank and even perform split-second barrel rolls to evade aerial threats.

<http://www.bbc.co.uk/news/science-environment-26943442>

Dr Caroline Brennan from QMUL outlines five reasons why zebrafish make excellent research models for the NC3Rs blog. These include their genetic similarity to humans, ease of husbandry relative to rodents, and ease of genetic modification. She also discusses how the benefits of using zebrafish apply to genetic research.

<http://blog.nc3rs.org.uk/five-reasons-why-zebrafish-make-excellent-research-models/>

02/04/2014

A long-term study, running since 1989, has found that rhesus macaques fed on a calorie restricted diet were less likely to die at any age than those monkeys who could eat whatever they wanted.

<http://www.nature.com/news/monkeys-that-cut-calories-live-longer-1.14963>

Hair growth appears to control the growth of fat beneath the skin in mice, thanks to a protein that activates hair follicle growth while blocking the production of fat tissue.

<http://www.telegraph.co.uk/science/science-news/10737249/Fat-dissolving-cream-could-follow-new-discovery.html>

The discovery of green fluorescent protein (GFP) in a jellyfish changed the course of biology, but now researchers are looking to ocean dwelling animals again to find the next big biological imaging breakthrough.

<http://www.theguardian.com/science/2014/apr/01/neurobiology-atlantic-ocean-bioluminescent-medical-imaging>

The common ancestor of modern lions lived around 124,000 years ago, according to an analysis of living lions and museum specimens.

<http://www.bbc.co.uk/nature/26736688>

01/04/2014

Self healing muscle, grown in vitro, that could be used to repair tissue damage in humans has been tested using mice.

<http://www.bbc.co.uk/news/health-26821080>

A collaboration between three leading UK research institutes is designed to improve scientific practise around mouse models of ageing.

<http://blog.nc3rs.org.uk/collaborative-effort-to-reduce-animal-use-and-share-best-practise-in-ageing-research/>

Halving the number of animal health surveillance units in the UK could leave Britain vulnerable to outbreaks of diseases like BSE, which may transmit to humans.

<http://www.bbc.co.uk/news/science-environment-26822870>

Scientists have called on Spain to ban the use of veterinary diclofenac, amid concerns about the effects it may have on European vulture populations.

<http://news.sciencemag.org/environment/2014/03/scientists-call-spain-ban-vulture-killing-drug>