



## News feed archive July – September 2014

**24/09/2014**

Over the weekend Jonathan Leake from the Sunday Times covered the planned construction of an intensive care research unit at the University of Edinburgh that will house eight pigs.

[http://www.thesundaytimes.co.uk/sto/news/uk\\_news/Science/article1487273.ece?CMP=OTH-gnws-standard-2014\\_11\\_22](http://www.thesundaytimes.co.uk/sto/news/uk_news/Science/article1487273.ece?CMP=OTH-gnws-standard-2014_11_22)

Times Higher Education have an interesting debate between University of London COO Chris Cobb and Director of the Campaign for Freedom of Information Maurice Frankel on whether universities should be exempt from the FOI Act.

<http://www.timeshighereducation.co.uk/comment/opinion/should-universities-be-exempt-from-the-foi-act/2016992.article>

The Northern Ireland statistics for research animal use in 2013 have been published, showing an increase in the number of animals used from 17,445 to 18,638.

[http://www.dhsspsni.gov.uk/statistics\\_of\\_scientific\\_procedures\\_on\\_living\\_animals\\_northern\\_ireland\\_2013.pdf](http://www.dhsspsni.gov.uk/statistics_of_scientific_procedures_on_living_animals_northern_ireland_2013.pdf)

**21/09/2014**

Four papers published in *Nature* examined gene expression and regulation across the entire mouse genome.

<http://www.washingtonpost.com/news/speaking-of-science/wp/2014/11/19/scientists-substitute-mice-for-humans-but-new-research-shows-just-how-similar-we-are/>

Damaged areas in the brains of mice have been regenerated by converting structural cells into functioning neurons.

<http://www.theguardian.com/science/2014/nov/20/brain-damage-nerve-cells-neurons>

Talk Radio News Service in Washington has reported on the 44<sup>th</sup> annual Society for Neuroscience conference, during which “scientists and activists urged their colleagues to be more open about animal testing in research.”

<http://www.talkradionews.com/politics-2/2014/11/20/scientists-encourage-peers-transparent-animal-research.html#.VG8DwPmsVRo>

**19/09/2014**

The neurons that fire in a mouse's brain in response to fear or addiction have been revealed by a technique that makes brain tissue completely transparent.

<http://www.nature.com/news/transparent-brains-reveal-effects-of-cocaine-and-fear-1.16365>

**18/09/2014**

A key ingredient in cosmetics, soaps, shampoos and detergents, Triclosan, causes liver cancer in mice.

<http://www.independent.co.uk/news/science/triclosan-soap-ingredient-can-trigger-liver-cancer-in-mice-warn-scientists-9866176.html>

Marina Klaric of Cosmetics Europe tells the NC3Rs how the cosmetics industry is moving forwards following changes to EU cosmetics testing regulations using animals.

<http://www.nc3rs.org.uk/news/science-cosmetic-testing-without-use-animals>

'Sea star wasting disease', a condition that turns healthy sea stars into piles of goo in a matter of days and has devastated populations along the Pacific coast of North America, may be caused by a virus.

<http://www.nature.com/news/first-clues-found-in-mysterious-sea-star-die-off-1.16359>

**12/09/2014**

Tests of 'good bacteria' yoghurt products using pig stomach acid have shown that many of them are likely to be useless.

<http://www.thetimes.co.uk/tto/science/article4204202.ece>

**11/09/2014**

A stem cell treatment for blindness successfully tested in primates has been cleared for human clinical trials.

<http://www.nature.com/news/next-generation-stem-cells-cleared-for-human-trial-1.15897>

Sequencing the genome of the gibbon has revealed an amazing amount of scrambling and reshuffling.

<http://www.newscientist.com/article/dn26187-shattering-dna-may-have-let-gibbons-evolve-new-species.html#.VBFasPldWPY>

**10/09/2014**

Xenon gas treatment after a head injury reduces the extent of brain damage according to research using mice.

[http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news\\_8-9-2014-11-43-59](http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_8-9-2014-11-43-59)

**09/09/2014**

The WHO have today announced a "crash programme" designed to test experimental treatments on patients with Ebola in an attempt to stem the epidemic.

<http://www.newscientist.com/article/dn26172-who-fasttracks-use-of-experimental-drugs-for-ebola.html#.VA8SWfmwL9U>

Science magazine have covered the results of the Ipsos MORI Public Attitudes to Animal Research polling, but in a somewhat different manner to other news outlets.

<http://news.sciencemag.org/biology/2014/09/how-much-does-public-support-animal-research-depends-question>

**05/09/2014**

The anticancer abilities of the naked-mole rat are about to be tested in mice for the first time.

<http://www.thetimes.co.uk/tto/science/article4196993.ece>

Archer fish, which use jets of water to shoot down prey, are able to adjust the power of their shots to ensure that they arrive with maximum impact.

<http://www.bbc.co.uk/news/science-environment-29046018>

**04/09/2014**

Using touchscreens in research is revealing fascinating things about the behaviour of different animals, and are becoming increasingly important as welfare tools.

<http://www.bbc.com/future/story/20140903-why-animals-love-touchscreens>

It may be possible to 'retrain' the immune system to treat or even prevent autoimmune conditions like multiple sclerosis or Type I diabetes, according to a study using mice.

<http://www.telegraph.co.uk/health/healthnews/11073397/Multiple-sclerosis-could-be-switched-off-by-retraining-immune-system.html>

**03/09/2014**

Cockatoos may rival crows in their problem-solving and tool-using abilities, as a new study shows that they are capable of emulating tool-making tricks when shown them by another bird.

<http://www.bbc.co.uk/news/science-environment-28990335>

Monkeys at different position in their social hierarchy have physically different brains.

<http://www.bbc.co.uk/news/science-environment-29013592>

Wild marmosets can learn new behaviours from strangers, a feat that has previously been observed only in laboratory conditions.

<http://www.nature.com/news/marmoset-see-marmoset-do-1.15818>

**02/09/2014**

Russia's Space Agency has confirmed that five geckos sent into orbit on a 'space sex mission' have sadly died.

<http://www.theguardian.com/science/2014/sep/01/russia-death-five-geckos-space-sex-mission>

Tiny hairs or cilia on the surface of corals create powerful vortices in the surrounding water that draw in nutrients and expel toxic waste products.

<http://www.bbc.co.uk/news/magazine-28987968>

A new cat vaccination could be a great help to allergy sufferers, as it targets a key protein that is the most common cause of cat allergy.

<http://www.dailymail.co.uk/health/article-2740223/The-vaccine-jab-kitty-cure-allergy-cats-Injection-targets-protein-pets-saliva-urine-sweat-common-cause.html>

**01/09/2014**

A 'quick test' for malaria has shown early success correctly identifying the parasite in both infected human and mouse blood samples.

<http://www.nature.com/news/quick-test-for-malaria-shows-promise-1.15796>

The Daily Mail explores the 'organ-on-chip' devices that could one day be used to develop new medicines.

<http://www.dailymail.co.uk/news/article-2739016/Farms-artificial-humans-replace-animal-testing-three-years-say-experts.html>

Science AAAS have a great article about the hope and the hype behind Ebola virus treatments, and in particular the now famous 'wonder drug' Zmapp.

<http://news.sciencemag.org/biology/2014/08/experimental-ebola-drug-saves-monkeys-will-translate-humans>

**29/08/2014**

Toxoplasma gondii, otherwise known as the terrifying mind control cat parasite, appears to control the behaviour of its hosts by making subtle changes to their DNA.

[http://www.nytimes.com/2014/08/28/science/parasites-practicing-mind-control.html?\\_r=0](http://www.nytimes.com/2014/08/28/science/parasites-practicing-mind-control.html?_r=0)

Domesticating rabbits caused around 100 regions of their genome to change according to new research.

[http://www.newscientist.com/article/dn26116-taming-of-the-bunny-rewrote-rabbit-genome.html#.VAAqW\\_IdXSs](http://www.newscientist.com/article/dn26116-taming-of-the-bunny-rewrote-rabbit-genome.html#.VAAqW_IdXSs)

A human trial to test the safety of a promising Ebola vaccine is set to begin in the UK next month.

<http://www.dailymail.co.uk/health/article-2736932/Ebola-vaccine-discovered-British-scientists-available-end-year.html>

Around this time of year pet dogs also suffer from the "back to school blues".

<http://www.thetimes.co.uk/tto/science/article4189985.ece>

**28/08/2014**

Artificially activating circuits in the mouse brain can change bad memories into good ones.

<http://www.bbc.co.uk/news/science-environment-28950532>

Some fish can adapt to living out of water including developing the way that they walk, giving scientists an idea of how the prehistoric fish ancestors of all terrestrial vertebrates first left the oceans.

<http://www.nature.com/news/how-fish-can-learn-to-walk-1.15778>

Researchers from Cambridge and Oxford Universities have identified a 560 million year old fossil animal that shows evidence of early muscle tissue.

<http://www.cam.ac.uk/research/news/animals-first-flex-their-muscles#sthash.j7I9KPGk.dpuf>

A study of altruistic behaviour in monkeys and humans has suggested that the adoption of cooperative care of infants lead to the high levels of altruism observed in human populations.

<http://news.sciencemag.org/brain-behavior/2014/08/human-altruism-traces-back-origins-humanity>

**27/08/2014**

The natural embryonic development of the spinal cord has been successfully mimicked in vitro using both mouse and human cells.

<http://www.independent.co.uk/news/science/breakthrough-in-spinal-cord-research-could-lead-to-eventual-motor-neurone-disease-cure-9692343.html>

An amputee who took part in a trial of a new artificial limb implant has hailed the technology, saying that "It's like they've given me my leg back."

<http://www.theguardian.com/science/2014/aug/26/amputee-hails-pioneering-prosthetic-leg-artificial-limb>

A cotton-top tamarin who was stolen from Blackpool zoo and returned earlier this year has given birth to healthy twins.

<http://www.theguardian.com/world/2014/aug/26/endangered-monkey-twins-blackpool-zoo>

**26/08/2014**

Studies in mice have shown that clostridia bacteria in the gut can help to prevent allergies, and can even be used to treat peanut allergy.

<http://www.bbc.co.uk/news/health-28887088>

A whole functional organ has been grown from scratch inside a mouse for the first time.

<http://www.bbc.co.uk/news/health-28887087>

A Japanese company claims to have 20,000 doses of an experimental Ebola drug that has proved effective in mice.

<http://www.dailymail.co.uk/health/article-2733587/Japan-ready-offer-flu-drug-Ebola-treatment.html>

**22/08/2014**

Marmoset monkeys may be the key to developing new treatments for Middle Eastern Respiratory Syndrome (MERS)

<http://news.sciencemag.org/health/2014/08/marmosets-may-help-humans-fight-deadly-coronavirus>

Urban-dwelling spiders are getting bigger thanks to warmer temperatures and more abundant food sources.

<http://www.independent.co.uk/news/science/cities-are-breeding-bigger-spiders-say-scientists-but-thats-definitely-a-good-thing-9683292.html>

**21/08/2014**

Using Botox to kill the nerves surrounding growing stomach cancers in mice appeared to halt the growth of the tumours and make them more vulnerable to chemotherapy.

<http://www.bbc.co.uk/news/health-28860837>

A treatment administered days after infection has saved money from Marburg virus, a deadly relative to Ebola.

<http://www.nature.com/news/drug-saves-monkeys-from-close-relative-of-ebola-1.15745>

Scientists at Arizona State University have identified a genetic programme that could explain how lizards are able to regrow their tails.

<http://www.independent.co.uk/news/science/scientists-discover-how-lizards-regrow-tails-9681841.html>

Transfusing young mouse blood into older animals can improve cognition and the health of several organs, and as of October the first human trial of this therapy will begin.

[http://www.newscientist.com/article/mg22329831.400-young-blood-to-be-used-in-ultimate-rejuvenation-trial.html#.U\\_WqmPldWPY](http://www.newscientist.com/article/mg22329831.400-young-blood-to-be-used-in-ultimate-rejuvenation-trial.html#.U_WqmPldWPY)

**20/08/2014**

Snakes squeeze trees up to five times harder than they need to when climbing them because the risk of falling off is so high.

<http://www.bbc.co.uk/news/science-environment-28853225>

**19/08/2014**

Stimulating the movement centre of the brain appears to improve stroke recovery in mice.

<http://www.bbc.co.uk/news/health-28836134>

Hearts from genetically altered piglets have been successfully transplanted in the baboons, in a US study examining the likelihood of donor organ rejection.

<http://www.alphagalileo.org/ViewItem.aspx?ItemId=144565&CultureCode=en>

A mysterious penguin disease that causes young birds to shed their feathers, leaving them vulnerable to hypothermia, has spread from South Africa to Argentina and has most recently been observed in Antarctica.

<http://news.sciencemag.org/plants-animals/2014/08/mysterious-penguin-disease-spreads-antarctica>

In the light of the current Ebola outbreak, Forbes magazine examines the experimental drugs other than Zmapp that could also be used to treat the disease.

<http://www.forbes.com/sites/scottgottlieb/2014/08/18/as-the-ebola-outbreak-expands-these-experimental-drugs-could-see-action/>

The NC3Rs has announced £2.2 million of awards in its 2014 project and pilot study grant competition, taking the total invested in 3Rs research by the organisation to over £40 million in the last ten years.

<http://www.nc3rs.org.uk/news/new-nc3rs-funded-research-projects-push-total-investment-over-40-million>

**18/08/2014**

Mice given repeated low doses of antibiotics during early life are extremely prone to obesity, according to a new study that examined the role of gut bacteria in metabolism.

<http://news.sciencemag.org/biology/2014/08/taking-antibiotics-early-life-leaves-mice-prone-obesity>

The World Health Organisation is considering whether “convalescent serum” – using the blood of people who have recovered from an infection – could be used as a potential treatment in the current Ebola virus outbreak.

<http://news.sciencemag.org/africa/2014/08/who-ponders-treating-ebola-infected-people-blood-survivors>

A US study from last year raised doubts about the usefulness of mice as a model for human inflammatory conditions, but now a Japanese study has re-analysed their data and come to a different conclusion.

<http://www.ft.com/cms/s/2/1665e372-2276-11e4-9d4a-00144feabdc0.html#axzz3AjF67T6p>

How do you find orang-utans? Well Scientific American have sought to answer this common problem with a piece by orang-utan researcher James Askew, who writes about the process of monitoring and studying wild orangs in the jungles of Sumatra.

<http://blogs.scientificamerican.com/expeditions/2014/08/15/call-of-the-orangutan-how-to-find-an-orangutan/>

**15/08/2014**

By editing a faulty gene in embryonic mice scientists have been able to prevent the muscle wastage that is characteristic of Duchenne muscular dystrophy.

<http://www.theguardian.com/science/2014/aug/14/muscular-dystrophy-prevented-mice-gene-editing>

Competition for ecological niches can limit the evolution of new species, causing the rate of speciation to slow or even stop as the available niches fill up.

<http://www.theguardian.com/science/grrlscientist/2014/aug/14/birds-evolution-phylogeny-speciation-ecology-himalayas>

Human and animal parenting share many similar nervous system mechanisms according to a new review of the biological mechanisms governing the shift in mammals' parental motivation.

<http://m.phys.org/news/2014-08-parallels-human-animal-parenting-benefit.html>

**14/08/2014**

Martha Gill writes in the Spectator that: “I’m no fruit-loop activist, I just think we should keep our line on vivisection consistent.”

<http://www.spectator.co.uk/features/9286672/i-believe-in-animal-research-but-its-time-to-draw-a-line/>

Injecting bacteria into dog tumours, and even one human cancer patient, has caused cancerous growths to shrink.

<http://news.sciencemag.org/biology/2014/08/bacteria-shrink-tumors-humans-dogs>

**13/08/2014**

UK Scientists Prof Robin Lovell-Badge and Dr Dusko Ilic have cautioned against the cloning of pet dogs after the first cloned dog arrived in Britain on Saturday.

<http://www.thetimes.co.uk/tto/science/article4174546.ece>

The World Health Organisation has ruled that it is ethical to use unapproved treatments to treat Ebola patients in West Africa, prompting Canada to donate 800-1000 doses of an experimental vaccine that has so far only been tested (successfully) in animals.

<http://www.nature.com/news/should-experimental-drugs-be-used-in-the-ebola-outbreak-1.15698>

Gold nanospheres coated in anti-cancer drug cisplatin have prevented the spread of cancer cells in vitro.

<http://www.bbc.co.uk/news/health-28754152>

**12/08/2014**

Tiny blobs of brain tissue grown in vitro from adult rat neurons have shown signs of activity, and have the potential to transform the understanding of dementia and other brain disorders.

<http://www.thetimes.co.uk/tto/science/article4173301.ece>

334 genes have been identified in rats that may be involved in vulnerability to post traumatic stress disorder.

<http://www.nature.com/news/spread-of-genes-implicated-in-post-traumatic-stress-disorder-1.15699>

**21/07/2014**

HIV appears to rapidly form highly invulnerable “viral reservoirs” throughout the body even before the virus can be detected in the blood, according to studies of monkey equivalent of the disease.

<http://www.bbc.co.uk/news/health-28352370>

A low cost nasal spray that prevents the rapid onset of paralysis following a snakebite has improved survival rates in mice dosed with deadly cobra venom.

<http://www.theguardian.com/global-development/2014/jul/18/india-snakebite-victims-nasal-spray-reduce-deaths>

**17/07/2014**

A “biological pacemaker”, created by injecting a specific gene into heart cells, has effectively cured a disease in pigs that causes a very slow heart rate.

<http://www.bbc.co.uk/news/health-28325370>

A single protein has appeared to reverse the symptoms of type 2 diabetes in obese mice.

<http://www.dailymail.co.uk/health/article-2695153/Protein-discovery-reverse-damage-diabetes-Breakthrough-lead-cheap-drug-halt-disease.html>

**15/07/2014**

A chemical found in cinnamon could protect the brain against Parkinson's disease according to research using mice.

<http://www.dailymail.co.uk/health/article-2688057/Cinnamon-fight-Parkinsons-Spice-source-chemical-help-protect-brain.html>

Mouse studies have provided the first evidence for how the psychoactive ingredient in cannabis can slow the growth of cancer tumours.

<http://www.independent.co.uk/life-style/health-and-families/health-news/scientists-reveal-how-thc--found-in-cannabis--could-slow-cancer-tumour-growth-9605219.html>

**14/07/2014**

The surface charge of micelles, nanoparticles designed to deliver drugs within the body, could make the difference between successful treatment and possible damage to brain tissue.

<http://news.sciencemag.org/brain-behavior/2014/07/nanoparticles-may-harm-brain>

A Danish study has identified a gene linked with attention deficit hyperactivity disorder in mice that the researchers believe could have the same activity in humans.

<http://sciencenordic.com/adhd-gene-found>

**11/07/2014**

The diet of a female mouse not only impacts upon her immediate offspring, but on the health of her grand offspring as well.

<http://www.nature.com/news/starvation-in-pregnant-mice-marks-offspring-dna-1.15534>

Genetics rather than environment appear to be key in determining primate intelligence, according to research using captive chimpanzees.

<http://www.independent.co.uk/news/science/nature-rather-than-nurture-governs-intelligent-behaviour-in-primates-scientists-discover-9598283.html>

The first ever vaccine for dengue fever has appeared to be successful during a large scale human trial.

<http://www.bbc.co.uk/news/health-28243587>

The 10th July saw the publication of the annual statistics for the use of animals in scientific research by the UK Home Office. The overall number of animals decreased by 0.4%, but the number of procedures showed a slight increase.

<http://www.bbc.co.uk/news/health-28243587>

**09/07/2014**

Rats can deliberately change how they use their facial whiskers to sense their environment in the dark, in much the same way as humans use hands and fingers.

<http://www.dailymail.co.uk/sciencetech/article-2685030/How-rats-dark-Rodents-use-whiskers-way-humans-use-hands-feel-way-around.html>

Contrary to the usual gender stereotypes found in nature, female snapping shrimp are more aggressive than their male counterparts.

<http://www.bbc.co.uk/nature/28203680>

Similar memories have been found to overlap physically in the brain, and if this region of the brain is bigger confusion associated with recalling those memories is reduced.

<http://www.bbc.co.uk/news/science-environment-28209477>

Edinburgh Zoo's female giant panda Tian Tian may have successfully conceived following artificial insemination.

<http://www.telegraph.co.uk/earth/earthnews/10954346/Britains-only-female-giant-panda-has-conceived-after-artificial-insemination.html>

**08/07/2014**

A contraceptive computer chip, backed by Bill Gates, will be submitted for pre-clinical testing in the US next year.

<http://www.bbc.co.uk/news/technology-28193720>

A blood test to detect Alzheimer's Disease has been developed by UK scientists, and could be used to identify the disease early on before symptoms have begun to show.

<http://www.theguardian.com/society/2014/jul/08/blood-test-predicts-onset-alzheimers-disease>

Haaretz reports that the numbers of animals used for research in Israel has increased by 6% on the previous year's numbers.

<http://www.haaretz.com/life/science-medicine/.premium-1.603567>

**07/07/2014**

The notion that, for a very small number of people, it is possible to be obese but healthy has been explored using genetically modified mice.

<http://news.sciencemag.org/biology/2014/07/can-you-be-obese-and-still-be-healthy>

Researchers at the University of Toronto believe they have found the reason that we cannot remember the first few years of childhood.

<http://www.independent.co.uk/news/science/why-you-dont-remember-being-a-baby-study-examines-infantile-amnesia-9581441.html>

**03/07/2014**

The loss of limbal stem cells in the eye, from disease or injury, is one of the leading causes of blindness.

<http://news.harvard.edu/gazette/story/2014/07/new-way-to-regrow-human-corneas/>

The first organs that include a full vascular network for transporting blood through them have been produced using a 3D 'bio printing' technique

<http://www.dailymail.co.uk/sciencetech/article-2678614/The-end-transplant-waiting-lists-Researchers-reveal-giant-leap-printing-replacement-organs-say-soon-created-demand.html>

**02/07/2014**

Genetically modified cells capable of neutralising deadly nerve agents could be used to protect soldiers on the battle field, according to research using mice.

<http://www.independent.co.uk/news/science/future-soldiers-could-be-protected-against-germ-warfare-by-genetically-modified-blood-cells-9574123.html>

Genes from a hibernating frog could hold the key for safe human space travel.

<http://www.independent.co.uk/news/science/scientists-say-burrowing-frogs-genes-could-help-humanity-voyage-into-space-9576104.html>

**01/07/2014**

Genetically modified cells capable of neutralising deadly nerve agents could be used to protect soldiers on the battle field, according to research using mice.

<http://www.independent.co.uk/news/science/future-soldiers-could-be-protected-against-germ-warfare-by-genetically-modified-blood-cells-9574123.html>

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