

Innovation today

The University of Birmingham has always had a central role in the life of the West Midlands. We were founded with the purpose of training the city's – and the world's – future business leaders, as well as undertaking research that improves lives, societies and industries. Our wealth of global expertise puts us at the forefront of technological, medical and social innovation today.

Some of our key research from 2013

[Small sun hosts mini planet in distant solar system \(/news/latest/2013/02/20-Feb-13-Small-sun-hosts-mini-planet-in-distant-solar-system.aspx\)](/news/latest/2013/02/20-Feb-13-Small-sun-hosts-mini-planet-in-distant-solar-system.aspx)

Scientists have detected a rocky planet that is smaller than Mercury, the smallest planet in our solar system, orbiting a solar-type star 80% of the size and mass of the Sun. Bill Chaplin, Professor of Astrophysics at the University's School of Physics and Astronomy, led the asteroseismic modelling work to determine the exact dimensions of the star, and the absolute size of the planet.

[A spiritual ceremony \(/news/latest/2013/10/Maori-remains-make-the-long-journey-to-their-ancestral-home.aspx\)](/news/latest/2013/10/Maori-remains-make-the-long-journey-to-their-ancestral-home.aspx)

A delegation from the Museum of New Zealand Te Papa Tongarewa from Wellington visited the University in October and held a repatriation ceremony, where a collection of Maori skeletal remains and a tattooed Maori head were given back to the Maori people. The remains were uncovered by staff in the anatomy department in the University's College of Medical and Dental Sciences, but how they arrived at the University or even in the UK is shrouded in mystery.

[The Beginning of Time? \(/research/impact/our/news/items/beginning-of-time.aspx\)](/research/impact/our/news/items/beginning-of-time.aspx)

British archaeology experts have discovered what they believe to be the world's oldest 'calendar', created by hunter-gatherer societies and dating back to around 8,000 BC. The Mesolithic monument was originally excavated in Aberdeenshire, Scotland, by the National Trust for Scotland in 2004. Now analysis by a team led by the University of Birmingham sheds remarkable new light on the luni-solar device, which pre-dates the first formal time-measuring devices known to Man, found in the Near East, by nearly 5,000 years.

[Heads-up on concussion dangers \(/news/latest/2013/11/Birmingham-researchers-look-to-give-sports-clubs-a-heads-up-on-concussion-dangers.aspx\)](/news/latest/2013/11/Birmingham-researchers-look-to-give-sports-clubs-a-heads-up-on-concussion-dangers.aspx)

A study looking into what happens to the brains of sportspeople in the aftermath of a concussion – and what could happen if they suffered a subsequent head injury - has been launched by researchers at the University of Birmingham. The study aims to discover new ways to identify how vulnerable the brain is in the minutes, hours and days following an initial concussion.

[Commission calls for a new not-for-profit organisation to represent savers \(/news/latest/2013/10/21-10-13Commission-calls-for-a-new-not-for-profit-organisation-to-represent-savers.aspx\)](/news/latest/2013/10/21-10-13Commission-calls-for-a-new-not-for-profit-organisation-to-represent-savers.aspx)

A hard-hitting report on the distribution of wealth in the UK calls for a series of measures to encourage saving – even among those on the lowest incomes – and for a new not-for-profit body to represent the interests of savers. Launched in Westminster in October, the University of Birmingham Policy Commission report, entitled: *Sharing our good fortune: understanding and responding to wealth inequality* urges policy makers to do more to help people avoid problem debt.

Comment areas from 2013

The University has been prominent in commenting on a number of the key news stories affecting the UK and beyond, such as chemical warfare in Syria, charitable giving, the psychology of appetite, superdiversity, and the government's Spending Review.

[Chemical warfare: It's nothing new \(/news/thebirminghambrief/items/2013/09/chemical-warfare-its-nothing-new.aspx\)](/news/thebirminghambrief/items/2013/09/chemical-warfare-its-nothing-new.aspx)

As millions flee Syria and the international community continues to consider its response to claims that chemical weapons may have been unleashed on civilians there; it is worth reflecting that in the science of modern warfare, truly, there is nothing new under the sun.

[Comic Relief 25 years on: why charitable giving is no laughing matter \(/research/impact/thebirminghambrief/items/2013/03/Comic-Relief-25-years-on-why-charitable-giving-is-no-laughing-matter.aspx\)](/research/impact/thebirminghambrief/items/2013/03/Comic-Relief-25-years-on-why-charitable-giving-is-no-laughing-matter.aspx)

Tomorrow (15 March) will mark 25 years since the comedians Lenny Henry and Richard Curtis first launched Red Nose Day as the fundraising event for their charity, Comic Relief. Much of the funds will be directed at saving lives and alleviating physical and economic suffering in both Britain and the less developed countries of the world, particularly in Africa.

[Over-egging the chocolate this Easter: why you should always keep an eye on what you are eating \(/research/impact/thebirminghambrief/items/2013/03/Over-egging-the-chocolate-this-Easter-why-you-should-always-keep-an-eye-on-what-you-are-eating.aspx\)](/research/impact/thebirminghambrief/items/2013/03/Over-egging-the-chocolate-this-Easter-why-you-should-always-keep-an-eye-on-what-you-are-eating.aspx)

Many people will be buying chocolate Easter eggs this week. For most, eating chocolate will be an enjoyable indulgence but for others, the presence of chocolate in the house will be an unwelcome temptation and consumption may be associated with feelings of guilt about diet breaking.

[Why does superdiversity matter? \(/research/impact/thebirminghambrief/items/2013/05/Why-does-superdiversity-matter1.aspx\)](/research/impact/thebirminghambrief/items/2013/05/Why-does-superdiversity-matter1.aspx)

13 June sees the launch of the Institute for Research into Superdiversity, known as IRiS, at the University of Birmingham. It will bring together more than 60 academics from a wide range of disciplines across the University with practitioner researchers from 17 statutory agencies and community groups.

[Applying game theory to the government's Spending Review. Is it better to get in first or hold out for a better deal? \(/research/impact/thebirminghambrief/items/2013/06/Applying-game-theory-to-the-governments-Spending-Review-Is-it-better-to-get-in-first-or-hold-out-for-a-better-deal.aspx\)](/research/impact/thebirminghambrief/items/2013/06/Applying-game-theory-to-the-governments-Spending-Review-Is-it-better-to-get-in-first-or-hold-out-for-a-better-deal.aspx)

Political negotiation is frequently a game of brinkmanship, played out in the national media with private briefings and leaking of documents, and occasionally public arguments. With the latest Spending Review running its protracted course, we have again seen the same public posturing and hurried back-room deals that epitomise the art of negotiation in politics.