# News story: Business innovations to tackle brain injury and back pain

Close up of head and brain scan: Credit: DedMityay at Shutterstock.com.

Faster treatment of brain injuries and relief for people with back problems are some of the game-changing innovations being backed in Innovate UK's latest open funding competition.

A total of £15.4 million has been awarded to 60 different projects working on new products, processes or services from a range of technology, science, engineering and industrial areas. The decision to fund them is based on their potential to generate significant positive impact and grow the UK economy.

# Quick, accurate decisions that improve chances of survival

One project, by <u>Cortirio</u>, is developing portable brain imaging technology to be used at the scene of accidents.

The company highlights that traumatic brain injury is the most common cause of death and disability among children and young adults. Its new technology will enable faster triage, diagnosis and treatment, thereby reducing disability burdens and saving lives.

Patrick Beldon, of Cortirio, said:

Neurosurgeons say that 'time is brain', and faster treatment means faster recovery and better quality of life.

For serious injuries, the chance of survival is 3 times higher if treated within 4 hours. Portable brain imaging will assist clinicians to make early, accurate decisions to give their patients the help they need.

### Positive contribution to quality of life

Another project to get funding comes from Pacla Medical. This incorporates sensor and spine-mapping software in its automated physiotherapy device — Robo-Physio — and uses robotic fingers to treat back stiffness.

Chongsu Lee, founder of Pacla Medical, said:

In the UK, back problems affect one in 10 people, and large numbers of working days are lost to back pain.

We feel Robo-Physio can make very positive contributions to people's quality of life by relieving back tension in their own homes. Our vision is to make Robo-Physio a must-have healthcare product for every household globally.

#### Industries of today and the future

Fionnuala Costello, Head of Open Programmes at Innovate UK, said:

In highlighting these examples of companies we're supporting, it demonstrates the impact our funding can have in developing gamechanging products, with the potential to change lives and significantly affect the way a market functions.

What struck me was the high quality of applications we received from all sectors of the UK economy. We are supporting companies that have the vision and bravery to use their own funds, combined with our grants, to explore disruptive innovations right across the industries of today and those of the future.

I am particularly pleased that these 60 projects have a total value of £38.4 million, of which £23 million is from the companies themselves.

I very much look forward to watching and supporting the progress of these innovative companies, as they launch new products, secure additional investment and acquire companies as they grow.

#### The open programme

As well as ranging in theme, the projects to get funding under open are at different stages of development, from conceptualisation through to prototype development and demonstration. The grant they get ranges from £25,000 to £1 million, for projects up to 36 months.

Further examples of projects to win funding include:

- <u>Eave</u>, which is developing an intelligent ear defender headset for use in heavy industry to address occupational hearing loss
- <u>GeneFirst</u>, which will use DNA sequencing technology to improve cancer treatment through better detection of cancer mutations in blood
- the NUOVOpb project, led by <u>Aurelius Environmental</u>, which is developing unique lead-acid battery recycling technology to reduce carbon dioxide emissions and waste
- <u>Sprint Electric</u>, which is researching and developing a range of variable speed drives for general industry. The aim is a more efficient control of electric motors that will use less energy in rotating loads in industrial processes
- Intray, which is developing time and temperature responsive labels for

food and medical application. Its labels use patented technology to inform consumers of any changes via a simple green-amber-red signaling mechanism

# Press release: Unemployment remains at four-decade low

The figures, released by the Office for National Statistics, also show that employment remains at a near record high, with 32.08 million people in work. There are also a record number of vacancies (798,000) in the economy at any one time.

Separate figures also released today show there are <u>660,000 people now</u> receiving <u>Universal Credit</u> as the rollout of the new benefit continues. Research shows that with Universal Credit people are moving into work faster and staying in work longer than compared to the old system.

Minister for Employment, Damian Hinds said:

We're ending the year on a strong note with figures showing the unemployment rate has fallen every month in 2017, and is now at the lowest it's been in over 40 years.

Employment is at a near-record high, and there are over 3 million more people in work now compared to 2010 — that's more than the population of Greater Manchester. Universal Credit is helping people get into work quicker, and ensuring they get more money in their pockets for every hour they work.

Universal Credit supports both the unemployed and the low paid, as people don't have to end their benefit claim when they find a job. This is especially important at this time of year, when many people take on temporary seasonal work.

Today's employment figures also show:

- the number of people in employment has increased by over 3 million since 2010
- youth unemployment has fallen by over 40% since 2010
- the proportion of young people who are unemployed and not in full time education remains below 5%

# More information Contact Press Office

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## <u>Press release: Wales' prosperity is</u> <u>underpinned by the efforts and</u> <u>aspirations of our Top 300 firms</u>

Since 2010 the UK Government has consistently and robustly put in place measures to help rebuild and nurture the UK economy.

We have announced the end of Severn Tolls, delivered City Deals for Cardiff and Swansea, initiated the largest and most ambitious programme of investment in rail infrastructure since the 19th Century and seen several multi-million pound defence contracts awarded to companies across the length and breadth of Wales — to name just a few.

We have also had to make some tough decisions along the way, and many have asked us to change tack.

But what we are seeing now proves they have been the right decisions. Our consistency in tackling the deficit whilst making the UK a good place to do business means that, not only are we seeing an economy that is growing, but

it is one that continues to create more jobs and continues to confound those who seek to talk it down.

Since 2010, Wales continues to be the fastest growing part of the UK outside London.

Welsh businesses can take their share of credit for what Britain has achieved in the years since the financial crisis.

Over the last year, we have seen further investment from businesses here in Wales.

In Newport, the train manufacturer CAF is expected to create 200 skilled jobs in its new factory, following a £30 million investment.

On a recent visit to North Wales, I saw for myself how healthcare company Ipsen is diligently expanding with a £22 million investment in its Wrexham site. The company has invested around £100million over the last three years on its North Wales footprint — securing high skilled jobs for the long-term.

As we celebrate this good news, we should keep clearly in mind what it all really means.

It's not simply numbers on a balance sheet, but an investment in people's livelihoods and the economic security of families across Wales.

It is a vote of confidence in Wales — in our talents, our skills, our infrastructure and our ideas. But our job now is to look to the future.

If the last ten years have seen us rebuilding our economic position, the next ten years must see the beginning of a new chapter in the story of the Welsh economy.

Because for all our progress, there is still a long way to go. The only way to achieve a stronger, better balanced economy and improve living standards across Wales in the long term is to improve our productivity.

That is the key goal of the recently launched Industrial Strategy White Paper — a strategy that invests in the skills, industries and infrastructure of the future to raise productivity and wages in all parts of our country. I want to ensure that we are putting our best foot forward to maximise the benefits for Wales from the initiatives and grand challenges it presents.

Our approach to the Industrial Strategy reflects our ambitions for the British economy as we leave the European Union.

A more productive, dynamic, innovative, world leading economy which embraces technological change and is globally focussed.

Indeed, the UK Government announced recently that Cardiff has been chosen to be one of ten new regional hubs across the UK for emerging tech firms.

That announcement is clear evidence of our commitment to Wales and confirms

its position at the leading edge of technology and digital development.

It also underlines the Government's support across the UK for digital startups and the expansion of existing businesses in the technology sector.

And of course, the UK Government has set out the way forward for a comprehensive and ambitious series of City Deals for Cardiff and Swansea, is progressing with a growth deal for North Wales and is opening discussions on a growth deal for the Mid Wales region.

These City Deals are not about carving out separate and isolated enclaves.

Quite the reverse. They are about creating a network of regional economic powerhouses capable of forging mutually beneficial connections and linkages.

The value of connectivity is clear beyond doubt. Just look at the natural business flows within the UK and across the border of Wales and England.

We want to build on those vital economic connections through growth corridors.

Between Deeside, Manchester and Merseyside we have one of the strongest manufacturing corridors in the UK. And between Bristol, Newport and Cardiff we have one of the strongest digital and creative corridors in the UK.

This is why abolishing the Severn tolls will deliver a £100m boost to South Wales. We are investing in cross-border rail such as the £16.1 million investment in the Halton Curve sending a direct message to businesses, commuters and tourists alike that we are committed to strengthening the links between the economies of England and Wales. Collaboration clearly designed for mutual benefit.

And in order to exploit this, I will host a Summit in the New Year at to bring together local partners from across the South West of England and South Wales to explore how we can further strengthen the links between the two economies.

As we seek to create a more outward looking, global Britain following our departure from the EU, I want to make sure that Welsh companies stand ready to exploit every opportunity our new trade relationships with the world can bring.

This year, I undertook trade missions to both Japan and Qatar- two powerhouse economies where we are looking to build on existing business links thought a new daily flight to Doha secured recently with the support of UK Government, as well as look at further opportunities for UK companies and institutions to operate in the region.

We want to make sure that Welsh firms, like those in this Top 300 list, capitalise on the support available from the Department of International Trade to enable them to not just trade in markets like Asia and the Middle East, but to thrive there.

From export advice, trade missions or access to the UK's 1,200 staff in 108 countries worldwide — there is a world class resource that businesses in Wales continue to tap in to.

And I firmly believe that the local support offered in Wales complements the support offered by UK Government.

Our success in global markets hinges on playing to the strengths that Wales has in abundance — a highly skilled workforce, an entrepreneurial spirit and a drive among our business leaders to succeed at home and overseas.

The growth we are seeing is a result of the efforts business like the Top 300 firms in Wales have invested. UK Government may be able to create the conditions for growth, but it is you that make it happen.

Read about the Top 300 businesses in Wales <a href="here">here</a>

# Press release: Ofsted Chief Inspector launches her first Annual Report on state of education and children's care in England

Launching her first Ofsted Annual Report as Her Majesty's Chief Inspector, Amanda Spielman said the life chances of the vast majority of young people in 2017 are the best they ever have been:

- 94% of early years providers are now rated good or outstanding
- 90% of primary schools and 79% of secondary schools are good or outstanding
- 80% of further education and skills providers of are good or outstanding
- 83% of children's homes are now good and outstanding
- more local authority children's services are on a path to improvement

However, she stressed that there are still areas of persistent underperformance in the education and care systems. It is here that policy-makers, professionals and Ofsted need to direct their support to improve outcomes for children and young people.

Speaking to an audience of education and social care professionals, local authority representatives and policy experts in Westminster, Amanda Spielman said:

Our collective mission — and by that everyone involved in education

and care — should be to create a society where every young person, regardless of birth or background, can achieve their full potential. Everything I see in my job, looking at the work of thousands of children's homes, colleges, schools and nurseries shows me that isn't an idle pipe dream.

In fact, the areas of concern identified in today's report are some of the last remaining barriers that stand in our way. Tackling them will not be easy. But the prize of doing so could be great — a country that is both caring and bold, innovative but unified, aspirational and at the same time fair.

To help policy-makers tackle those barriers, today's report identifies a small group of schools that have not improved over many years, including around 130 where under-performance has stretched for up to a decade. These schools share some similar characteristics, including unstable leadership, high staff turnover and difficulty recruiting. Many have high proportions of pupils from deprived areas and above average proportions of pupils with special education needs and/or disabilities (SEND).

These schools have all received considerable attention and investment from external agencies, but none of these interventions has worked. Yet schools in similar circumstances are achieving well, showing that improvement is possible.

The report also highlights problems in capacity within the school-led system. The best school leaders and strongest academy trusts are spread too thinly. They cannot provide all the support needed to help other schools improve. The Chief Inspector made clear that there is a challenge for both policy-makers and the education system to break down ivory towers and ensure that the best schools and leaders are supporting those in need.

#### Amanda Spielman continued:

There is no doubt that the leadership challenge facing some schools is great. But progress is possible and we should all be wary of using the makeup of a school community as an excuse for underperformance.

I do find myself frustrated with the culture of 'disadvantage one-upmanship' that has emerged in some places. Fixating on all the things holding schools back can distract us all from working on the things that take them forward. Schools with all ranges of children can and do succeed. Where this is difficult, what is needed is greater support and leadership from within the system. That means making sure the system has the capacity to provide this support.

And this isn't about just about incremental 'interventions' or 'challenge'. Good schools teach a strong curriculum effectively, and they do it in an orderly and supportive environment: getting this right is the core job of any school. That is what we need to

help these problematic schools to deliver.

Ofsted's commitment to being a force for improvement means focusing attention on those areas that are not yet good enough. Evidence shows that this helps drive up standards of practice in these areas.

Other areas of concern identified in the report include:

- An increasing number of conservative religious schools deliberately flouting British values and equalities law. Illegal 'schools' are also being created in order to avoid teaching fundamental values of democracy, mutual tolerance and respect.
- Weaknesses in the statutory framework for the early years foundation stage as a guide for children's learning in Reception Year. Schools that are best at preparing children for Year 1 are going beyond the framework and setting more challenging expectations, with an emphasis on reading and maths.
- The apprenticeship levy is raising a substantial amount of money to fund training. Without adequate scrutiny we will risk repeating the mistakes of the past — attracting cowboy operators that are not committed to high quality learning.
- Domestic abuse is the most common factor in the lives of children who need social care services. But more emphasis needs to be placed on tackling perpetrators and understanding what works to stop abusive behaviour.
- Secure children's homes are doing well for children and young people. But young offender institutions and secure training centres are sometimes extremely poor, closing down opportunities for rehabilitation of juvenile offenders.
- Some children and young people needing SEND support are having a very poor experience of the education system. And some parents have been pressured to keep their children at home because leaders say they can't meet their needs. This is unacceptable.

Over the next 12 months, Ofsted will continue to act as a force for improvement. New inspections of local authority children's services will begin in January, with a greater focus on catching areas before they fall. Work will also get underway to develop a new education inspection framework for 2019, building on recent findings and with a particular focus on the curriculum. And in FE and skills, Ofsted will closely monitor the quality of training to make sure learners get the entitlement they deserve.

## News story: The Attorney General

## Jeremy Wright QC MP: Economic crime

The damage caused by economic crime and corruption affects everyone in society. It threatens prosperity and the rule of law. It also damages public confidence in our ability to uphold our values.

Economic crime, at all levels, is a growing and changing threat and tackling it is a priority for the Government as we build a Britain that is fit for the future. Earlier this week, the Home Secretary set out a package of measures which will ensure that the UK continues to evolve into an ever more hostile environment for those involved in fraud, bribery, corruption and money laundering. I look forward to working with the new Economic Crime Minister to achieve this goal.

The Serious Fraud Office (SFO) will continue to play its part as an independent organisation, superintended by me in my role as Attorney General, and it will support the multi-agency response led by the National Crime Agency (NCA). The SFO will work as part of a collective effort with its partners in the National Economic Crime Centre. Economic crime has many aspects and it will take more than one agency to beat it. The SFO will continue to investigate and prosecute the most serious and complex of these. It currently has around 70 active criminal investigations in addition to a number of pre-investigation operations.

Yesterday (12 December), we launched the campaign to recruit the next Director of the Serious Fraud Office to succeed David Green when his tenure ends next year.

The role will be pivotal in driving through the package of reforms, working collaboratively to investigate and prosecute serious and complex cases effectively. It will be vital that we have an exceptional person to continue the significant progress the SFO has made in recent years in their response to economic crime.

The SFO has seen some major successes and breakthroughs recently, including 5 convictions for rate rigging offences relating to LIBOR and its first conviction after trial of a corporate entity for offences involving bribery of foreign officials. This year also saw 2 large Deferred Prosecution Agreements — with Rolls-Royce and Tesco Stores Ltd — which have contributed towards a net contribution to the Treasury in the order of £461m over 4 years. We have also seen the first guilty plea by a corporate entity for an offence under section 7 of the Bribery Act. This 'failure to prevent' offence approach is holding corporate offenders to account for criminal activity and the Government has extended it to the facilitation of tax evasion through the Criminal Finances Act.

Ultimately, economic crime undermines confidence in business, distorts markets, and erodes trust. The success of our national economy in the future requires a robust response and the next Director of the SFO will play a key role in ensuring that the UK is the best place to do business in the world.

The job advert is available on the Civil Service Jobs website and it closes at 9am on Monday 5 February 2018.