Research Europe

Challenge prizes created to bridge innovation gaps – p5

Estonia University shake-up planned - p6

EU elections Manifestos promise bright future, but process remains murky – p4, 7

Two-speed ERA could suit divided Europe

Advisers call for tiered system in face of research divergence

THE EUROPEAN COMMISSION should revise its policies for a unified European Research Area to acknowledge increasing divergence between member states, leading advisers have said.

According to the European Research and Innovation Area Board, the growing gap in research performance means that policy recommendations should no longer be based on the idea of a uniform ERA. The board's latest report, released on 10 March, says targets such as the 3 per cent goal for R&D spending relative to GDP are unsuitable for poorly performing regions.

"We should make a distinction between research targets that are feasible for the most developed regions and those for more peripheral regions," said Luc Soete, rector at Maastricht University in the Netherlands and chairman of Eriab, when he presented the report at the Innovation Convention in Brussels on 11 March.

Eriab's report refers to the appearance of "submerging" economies in countries that have cut R&D spending in response to the financial crisis. In its Innovation Union Scoreboard released this month, the Commission found that the performance divide between regions in Europe was increasing. "I think this is one of the most fundamental challenges that the EU is confronted with," Soete said.

Less successful regions should focus on investing in people and entrepreneurship rather than R&D and hi-tech facilities, the board suggests. It says the most important innovation in these areas is in services and human capital, and the Commission should reflect this in the measures it uses to assess progress—leaving developed regions to target enabling technologies and hi-tech industries.

Meanwhile, Horizon 2020 measures to help researchers in poorer regions, including the ERA Chairs initiative and various twinning programmes, should be given bigger budgets, the board recommends.

The advisers warn that Europe is not in the same position as it was when the ERA, Innovation Union and Europe 2020 policies were designed (see News, page 5). If they are not brought up to date, Europe will

by Laura Greenhalgh at the Innovation Convention

fall into a low-growth trajectory, satisfied with a 1 per cent annual expansion of GDP, they say. "If we don't get organised, we will really have a problem," agrees Manfred Horvat, professor of research and technology cooperation at the Vienna University of Technology.

But change within the EU must be accompanied by efforts to boost internationalisation beyond its borders without waiting until the ERA is unified, the board says. "We have to get organised to become a global player," said Barbara Haering, a member of the board and chief executive of the Swiss consultancy Econcept.

That means the Commission should raise international participation in Horizon 2020—for example by increasing how long winners of European Research Council grants can spend outside the EU. "We even envisage total portability with specific countries, as long as reciprocity is respected," says Haering.

International cooperation should be built around the grand challenges in Horizon 2020, the board says. This will require more open and flexible research agendas, as well as a willingness to take risks. "If we look back on Horizon 2020 and find that 97 per cent of the projects funded were successful, I think it will have been a big failure," said Lena Tsipouri, a member of Eriab and an economist at the University of Athens.

Participants at the conference responded positively to Eriab's recommendations. But Jan van den Biesen, vice-president of research at the technology firm Philips, also warned that "other high-level groups are preaching different messages".

Luke Georghiou, vice-president for research and innovation at the University of Manchester, said the

EU should learn from the United States and China and become less scared of competition. "Being open also means openness to ideas—taking the best from elsewhere and developing our own version," he said. "This is not about success at the expense of other parts of the world."

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a Research publication

elsewhere

"No-one is more innovative than a poor man or woman."

Bunker Roy, who founded India's Barefoot College education project, says Europe should instil a sense of self-reliance and resourcefulness in its overprotected citizens. Horizon Magazine, 5/3/14.

"Traineeships should be considered as an investment, being of value to the employer and the trainee."

Employment commissioner *László Andor* says training and further education must be part of traineeships in order to improve job security and career development. Pan-European Networks, 10/3/14.

"This is a waste of talent that we cannot afford."

Research commissioner *Máire Geoghegan-Quinn* says the low number of women in science is having a negative impact on Europe's excellence and competitiveness. Horizon 2020 Projects, 10/3/14.

"Governments intending to promote the international attractiveness of their tertiary education systems ought to boost investment in education and R&D."

Virginia Rincón Diez, a researcher at the University of the Basque Country, has found that successful academic research is a huge boon for universities seeking to attract international students. Euroscientist, 12/3/14.

"You have moronic engineers who can't picture end users who aren't exactly like them."

Computer science professor *David Gelernter*, based at Yale University in the United States, says bad interfaces have led to slow uptake of some innovative technologies that were thought to be sure-fire successes. Financial Times, 12/3/14.

"With such a major investment secured, there is no stopping it."

Philip Diamond, the director of the Square Kilometre Array telescope to be built in South Africa, describes the UK's £119-million contribution as the project's unofficial qo-ahead. Science Insider, 12/3/14.

decade

"Europe needs to start bridging this artificial gap that has existed."

Enterprise commissioner *Erkki Liikanen* says that in Framework 7, applications with both civil and military uses should receive funding from the same pot.

Research Europe, 18 March 2004

Unkindest cut

Ministers pull a fast one on academic research

When the budget for Horizon 2020 was signed off by the Council of Ministers in December, a lot of us thought that meant it was finally settled. In fact, a little trick still up the Council's sleeve will weaken support for academic research and line the pockets of a handful of large companies.

Under the outcome agreed by the European Commission, the European Parliament and the Council, the €80 billion originally proposed for Horizon 2020 by the Commission in June 2011 was pared back to €70.2bn.

Under the rules, however, it has become apparent that Joint Technology Initiatives have special protection within the proposal. The final outcome, it transpires, is that JTI budgets will be cut back only marginally from the original plans.

The Council, it turns out, wanted the JTIs to be fully protected. Under a deal accepted by the Parliament last month, JTIs will instead be cut by between 2.5 and 5 per cent from the original proposals. That means that other components of Horizon 2020—primarily, money for collaborative grants to academics—will be cut back sharply. Money for research to address societal challenges will now be 20 per cent less than proposed, with an even sharper drop in some areas, such as health and transport [RE 6/3/14, p5].

The trouble here isn't so much with the real impact of these reductions—we are, after all, talking about a nominal cut, from a proposal that was never enacted—as with the process that brought them about.

It is clear that the Council, operating, as usual, behind closed doors, decided unilaterally that JTI funding should take precedence over the rest of Horizon 2020. The ostensible reason for that is that JTI money is matched by industry: participating companies are supposed to contribute the same amount themselves.

But many believe that the emphasis of the JTI programmes is wrong, favouring the agenda of certain large companies over the wider good.

In the Innovative Medicines Initiative, for example, almost all of the emphasis is on drug development, at the expense of other potential research priorities such as epidemiology, environmental health and the investigation of efficient ways of organising healthcare.

There is, additionally, a strong argument that grants for excellent academic research provide better value for public money, in the long run, than (typically much larger) grants for industrial collaboration.

And there is a further, purely economic, case to be made that most of the resources going into the JTIs are stitched up by a handful of household-name companies, to the exclusion of the small and medium-sized businesses that are more likely to fuel innovation.

However, the main issue here isn't that any of these three arguments are cast iron. It is, rather, that neither the university lobby nor groups representing small businesses got the opportunity to make them. The final outcome smells of a stitch-up by representatives of some of Europe's largest companies. That's a pretty poor advertisement for the Commission's oft-repeated claim that its processes and programmes are becoming more transparent and more responsive to the wider needs of researchers or of society at large.

what's going on

Swiss foundation sets up ERC 'substitute'

The Swiss National Science Foundation is to create a temporary funding pot for researchers who had planned to apply to the European Research Council's Starting and Consolidator Grant schemes. The initiative will use ERC deadlines and be available to Swiss nationals and researchers trying to secure positions at Swiss institutions. Because of the country's suspension as an associate member in Horizon 2020, Swiss researchers cannot apply to the ERC schemes in 2014.

Parliament backs stricter data laws

MEPs have approved plans for a data protection regulation that would increase security for European citizens but could obstruct health research. The report on the General Data Protection Regulation, being steered through the European Parliament by German MEP Jan Philipp Albrecht, was adopted during a plenary session on 12 March. Health groups have said that the regulation could hamper medical research by preventing the use of pseudonymised or identifiable health data for research purposes without explicit consent.

Journal metrics flawed, junior scientists warn

Metrics for publication ranking undervalue interdisciplinary work, according to a policy paper issued by the European Council of Doctoral Candidates and Junior Researchers. The council says that a clear approach should be developed for deciding the level of interdisciplinarity of a research publication, and that all publications should be classified as either belonging to one discipline or being multidisciplinary. Interdisciplinary research should be published in journals that cover two or more relevant disciplines, even though such journals typically have lower impact factors than more traditional publications, the paper says.

HR accreditation pilot study proposed

An expert group funded by the European Commission to explore the possibility of an EU-wide certification system for managing researchers has recommended pushing ahead with a pilot. The initiative is intended to highlight good practice in human resources management, as part of the Commission's efforts to implement HR standards across the European Research Area.

Group warns commissioners to avoid 'revolving door'

The Alliance for Lobbying Transparency and Ethics Regulation, a lobby group promoting transparency in public life, has told EU commissioners to obey Commission conflict-of-interest rules when they leave office this summer. The group wants to block the revolving door that allows Commission officials to take up lucrative appointments in industries or organisations where their previous roles may retain some influence.

Businesses urge incoming MEPs to stand up for innovation

Innovation and research should be priorities when the next European Parliament discusses competitiveness, according to the lobby group Business Europe. In a report, the group urged the Parliament to ensure that spending on R&D reaches 3 per cent of GDP across Europe.

Belarus wants in on Bologna Process

The Bologna Process for university development could help improve the quality of education in Belarus if the country participates, according to deputy education minister Viktor Yakzhik. Belarus will submit an application to join the process next year.

europe

Campaign season

With the European Parliament elections approaching, **Laura Greenhalgh** looks at the major party manifestos to see what lies in store for science.

In Brussels, campaigning ahead of the elections in May is well under way. This month the European People's Party held its congress and released its manifesto, meaning that all the major groups have now set out their stalls.

During the last elections, in 2009, campaigns were dominated by discussions about the growing financial crisis and the problems ahead. This time, a more optimistic, pro-growth agenda has emerged—which appears to be positive for research. Against a backdrop of cuts to national R&D budgets in many member states, all the main political parties in the Parliament see more research spending, alongside structural reforms, as a way of exiting the crisis.

The most outspoken research advocate is Alde, the Alliance of Liberals and Democrats for Europe, which is the third-largest group in Parliament. It calls for significant changes, including less spending on agriculture, in order to prioritise research and innovation. Reform of the Common Agricultural Policy should result in investment in research and technologies for agriculture, fisheries and rural development, Alde says, and structural funds must continue to be directed towards innovation.

The largest group, the EPP, calls for a "growth-friendly budget consolidation" for education, research and technology. The second largest, the Party of European Socialists, supports such spending to stimulate reindustrialisation. Reforms to increase private investment also feature highly on the political checklist, with the EPP, the PES and Alde all saying that they intend to push for better conditions for small and medium-sized enterprises, start-ups and entrepreneurs in the next four years.

Another hot topic is the digital economy, in particular online privacy, following the Edward Snowden revelations. The EPP, the PES, Alde and the European Green Party all pledge to protect personal data online, a priority already demonstrated in the Parliament's stringent approach to the General Data Protection Regulation voted through this month. And the EPP and Alde both promise to support a single digital market in the EU, a cause championed by liberal Dutch commissioner Neelie Kroes.

Meanwhile, on open movement of researchers, the EPP describes the Pan-European transfer of skilled workers as an "absolute right", and Alde pledges to work for the "fifth freedom": the free movement of knowledge and people within and into Europe.

It is no surprise that the Green Party's campaign leads on renewable technology, with tackling climate change the main priority. The EU should tighten its binding emission and low-carbon energy targets, the party says, but phase out spending on fossil fuels, biofuels, shale gas fracking and nuclear energy—including on the Iter fusion project in France. Spending on environmentally friendly innovation, particularly in transport, ranks highly on its agenda.

Binding emission targets are a priority for the PES also, and Alde says that improvements to the Emissions Trading System and development of carbon capture and storage should be pursued to drive changes in energy use. The EPP promises to invest in renewable energy, but at the same time wants to ensure that energy prices stay low for industry—and offers no solution as to how these conflicting priorities will be resolved.

THE PARTY MANIFESTOS recognise a growing disenchantment with the EU. Reform of EU institutions is seen as a vital solution to waning public support; Alde calls for an audit of all EU agencies and for those not delivering to be abolished. The Green Party suggests that the European Citizens' Initiatives, which have already produced public petitions on animal testing and stem cell research, could play a greater role.

The biggest contrasts between the parties' positions are in immigration and the Transatlantic Trade and Investment Partnership, as well as the debate about the balance of powers between the EU and its member states. The EPP says Europe needs to be "bigger on big things and smaller on small things", leaving less important issues to the responsibility of individual countries, whereas other manifestos take more federalist stances.

The mix of different ideas will shape the future Parliament, with the latest poll figures suggesting that the PES will gain significant ground and edge out the EPP as the biggest group—particularly significant given that the leading group could get first claim for the nomination of the president of the European Commission. The EPP and Alde, as well as the Green Party, are all predicted to lose seats, in light of the expected rise of support for the far right and far left.

But much could change before the ballot boxes close, as for the first time there will be a televised debate between party leaders on 15 May, which they hope will grab voters' attention before elections start a week later.

Innovation prizes bring fresh approach to Horizon 2020

The European Commission will run a set of five innovation "challenge prizes" through Horizon 2020, in an experimental move away from traditional grant funding.

The prizes, set to be offered in 2015, will cover health, transport, energy and materials, and renewable biological resources, *Research Europe* has learned. Rewards will be given to whoever can first or most effectively solve predetermined problems, with the budget expected to be up to €20 million across the five fields.

"The Commission is looking for mechanisms to help stimulate breakthrough innovations that go beyond the incremental nature of grant funding," says David Altabev, a programme manager at UK innovation funder Nesta who is leading the development of the Horizon 2020 challenges.

The prizes will be open to organisations and researchers with different backgrounds. Some are likely to be 'winner takes all', whereas others will involve several stages at which the most promising ideas are funded to progress further, says Altabev. If the first round of prizes goes well, the idea is that more will be launched throughout Horizon 2020, he adds.

The Commission's move follows an increase in the use of challenge prizes to solve technological problems, particularly in the UK and the United States. On 10 March,

by Laura Greenhalgh

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the Commission awarded a €2m prize from a trial run that was launched as part of Framework 7 to develop heat-stable vaccines.

"Challenges help to incentivise researchers and to bring people in from left field," says Jonathan Slater, director of business innovation at the US-based challenge agency InnoCentive. People are attracted not only by the prize money but by the prestige of winning a high-profile award and gaining recognition from peers, he says.

Meanwhile, experiments at the Commission's Joint Research Centre have shown that a group of contestants as a whole can be expected to spend up to three times more on a project than the prize is worth, claims Benedikt Herrmann, a behavioural economist from the JRC's Institute for Prospective Technological Studies. "It's also a very important instrument to sharpen policymakers' minds," he adds.

However, Herrmann warns that prizes should not come at the expense of adequate support for basic and applied collaborative research. "Inducement prizes should not be a substitute for grant funding but an additional element," he says.

Output targets mooted as 3 per cent goal fades

Europe will probably not reach its target of spending 3 per cent of GDP on R&D by 2020, leaving experts to wonder whether a target for innovation output would work better.

In a communication reviewing progress of the Europe 2020 strategy, the European Commission admits that the 3 per cent target is "unlikely to be met", as R&D expenditure continues to linger around the 2 per cent mark. The EU looks more likely to reach spending levels of just 2.2 per cent by 2020, although this could be boosted to 2.6 per cent if member states meet their national targets, the Commission says.

Luke Georghiou, vice-president for research and innovation at the University of Manchester, says it is time to "deprioritise" the 3 per cent target and instead look at indicators of R&D output. He would like to see existing national innovation indicators that have been developed by different member states standardised into "something more realistic".

Horst Soboll, an adviser to the European Commission and former chairman of the European Research Advisory

by Penny Sarchet

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Board, agrees that measures of output are important in assessing innovation activity. "It's not just the number of papers and patents; it's also creativity, art and the connection to the humanities." These, says Soboll, are areas in which Europe is still ahead of Asia. "The volume doesn't give the full picture; you have to look at the quality."

The Europe 2020 strategy, launched in 2010, includes five policy and growth targets at the national level and across the EU. The Commission says that, since 2000, most member states have managed to increase expenditure on R&D, with a small boom in Estonia (see Interview, page 6). But spending in Croatia, Luxembourg, the UK and Sweden has failed to increase.

Despite being unrealistic from the outset, the 3 per cent goal has had its uses, says Polish physicist and former ERAB member Jerzy Langer. "Ten years ago I would have said it was a dream. Now, it has been imprinted onto politicians' and decision-makers' minds. It has become more of a modus operandi," he says.

interview jaak aaviksoo

Think big

Estonia's government plans to whip the country's universities into shape. Research minister Jaak Aaviksoo tells **Penny Sarchet** that opening up to its neighbours is the nation's only option.

"Estonia is not a small country," Aaviksoo asserts. "Estonia is a very small country." The minister for education and research delivers this observation with a sharp comic timing that is perhaps unusual for a politician or a physicist.

Aaviksoo is both. A researcher of optics and spectroscopy, he has held onto his chair at the University of Tartu throughout his time in Estonia's government, where he has been minister for education and research since 2011. His frankness and enthusiasm during our conversation convey his deep-rooted concern for the future of Estonia's universities.

He begins by outlining his long-term vision for raising standards at Estonia's six public universities. "We have a population of 1.3 million, with fewer than 1 million native Estonian speakers, he says, adding that the country's size puts it in a catch-22 situation. "We want to continue with traditional Estonian higher education, but we want to be internationally competitive," he explains. That may mean switching to international systems and English-language courses.

As part of this vision, Aaviksoo plans to cut student numbers, degree length and the number of courses available, and plough these efficiency savings back into the universities themselves.

"The main problem is that Estonian universities are very autonomous," says Aaviksoo. "They follow their

Jaak Aaviksoo

- *** 2011-present** Minister for education and research
- ★ 2007-2011 Minister for defence
- **★ 1998-2007** Rector, University of Tartu
- ★ 1996-1998 Head of the Institute of Physics and Technology, University of Tartu
- ★ 1981 PhD in physics and mathematics, Estonian Academy of Sciences
- * 1976 Masters in theoretical physics, University of Tartu

own standards, determine their own admission numbers and carry out their own quality assurance processes. For demographic reasons, fewer young people are graduating from school in Estonia, but the number of students admitted to university continues to go up. Universities are willing to admit as many students as possible."

This decline in standards is at odds with Aaviksoo's goal of raising the international profile of Estonian universities. "We want universities to focus—to have international ambition." What this ultimately boils

down to is bringing in staff and students from other countries, teaching in English and helping Estonian students to become bilingual. "This is a politically sensitive issue in a small community of Estonians," Aaviksoo admits, which may well be an understatement—he says he wants 80 per cent of students in Estonia to be from outside its borders.

Aaviksoo's planned reforms were brought one step closer to reality by the signing of an agreement with Volli Kalm, chairman of Estonia's council of rectors, on 4 March. This agreement will involve the ministry of education and research acting as a broker across all Estonian universities, in order to reduce admission numbers and raise standards. "If one university alone reduces student numbers, another will pick up more and have a competitive advantage," Aaviksoo says. He wants the ministry to coordinate reforms across the universities, ensuring that each institution participates equally.

The agreement is intended to remove funding uncertainties at universities that may be preventing them from raising standards and running more efficiently. And Aaviksoo has high hopes: he wants universities to cut the 705 different curricula they offer by five per cent annually for the next three years, by the end of which they should be running 30 per cent more efficiently.

When it comes to technology and knowledge transfer from Estonian universities, "we are definitely not happy with what we've got", he says. Again, an international perspective is what he thinks is required. "We only have a limited number of research-intensive partners, so we encourage our universities to reach out to Finland, Sweden and other neighbouring Nordic countries."

Similarly, he hopes to boost R&D spending in Estonia by opening up national R&D programmes internationally and encouraging research contracts and scientists to move as much as possible.

Estonia was classed as an innovation growth leader in the most recent EU Innovation Union Scoreboard, but Aaviksoo is somewhat dismissive of this apparent success. "The secret is that we almost started from scratch. There was very little innovation, so the growth numbers look impressive."

Ultimately, Aaviksoo hopes Estonia will build on its relative strengths in IT and medical services, and capitalise on its physical location at the edge of the EU. "We have a competitive advantage—we can offer western standards to eastern people."

But the small nation's success depends on its neighbourly relations, and this puts Estonia in a precarious position. "If we really want to grow, we have to look both westwards and eastwards," says Aaviksoo, commenting on the conflict playing out between Russia, Ukraine and the EU. "The tension is unfortunately growing, and this affects every kind of cooperation."

More to say? Email comment@ResearchResearch.com

horst hippler view from the top

Use elections to force open the doors of policy-making

For all their differing ideologies, the parties competing in the upcoming European elections share some common goals. Everyone can agree on the need to secure Europe's outstanding innovation capacity and competitiveness, and everyone can agree that research and education are fundamental to future economic success.

But despite the huge challenges facing the next European Commission, there is surprisingly little debate about how these goals should be achieved. How can lagging member states be strengthened without weakening the high performers? Should a one-size-fits-all approach be applied, even if it forces disruptive change on some nations? What are the different ways to build bridges between our 28 national research systems?

Indeed, much of the decision-making in the EU—the procedures to complete the European Research Area spring to mind—still seems to follow the model described by Jean-Claude Juncker, former prime minister of Luxembourg and the European People's Party candidate to be next president of the Commission: "We decide on something, throw the results into the room, wait and see what happens. If we hear no outcries of protest—and we won't because people outside Brussels have no idea what was decided—then we go on, step by step, until there is no turning back."

Europe's political groups should be offering its citizens a choice of alternative directions. Together with Jean-Loup Salzmann, president of France's CPU rectors' association, and Wiesław Banys, president of Poland's Krasp group of rectors, I recently suggested a list of policy 'touchstones'. These are aimed at encouraging the political groups to improve their policies in research, innovation and higher education. With the help of the European University Association, we plan to invite all national rectors' associations to join our initiative.

In April last year, we called on the EU to exclude spending on higher education, research and innovation from the calculation of the deficit limit of 3 per cent of GDP. During the financial crisis, many national governments used EU deficit limits as a cheap excuse for cuts in this area. Our proposal received very positive feedback from some commissioners.

Prompted by this, one of our suggestions is for the economic criteria laid out in the Maastricht Treaty to be supplemented by a minimum national investment in research, education and innovation. If we want to

Horst Hippler is president of the HRK, Germany's

association of university rectors.

ensure the future competitiveness of Europe—especially in times of crisis—we need to acknowledge expenditure on research and education as an investment.

Another priority is the 'knowledge triangle' of research, education and innovation, defined in the Lisbon Strategy of 2000 as the foundation of growth and development of a knowledge economy.

What are the results of this observation 14 years on? In Brussels, discussion of the knowledge triangle revolves around the European Institute of Innovation and Technology and its Knowledge and Innovation Communities. This is mistaking the cherry for the cake. The EIT is a nice bonus for European innovation. But universities, the most important actors in the knowledge triangle, are not strategically supported in their efforts to develop innovation ecosystems in their local areas.

A successful, innovation-oriented university fuses its roles in creating research and human capital, preparing the ground for successful innovation in its region. Most German universities, for example, are shaping their individual profiles and building excellence in areas where they see local, regional, national or even global business demand. German companies are extremely interested in basing their research, and even some of their production capacities, in science parks on university campuses.

If universities are to continue to develop a sense of the specific needs of their regions, their autonomy is essential and should be another policy priority. A university can only identify and meet demand—and assume its role as a hub in the knowledge triangle—if it is free to shape its profile and choose its specialisations in teaching, research and knowledge transfer.

It will be interesting to see what answers the political parties give to the policy challenges in our touchstones, and to hear their ideas on how to support universities and shape European education and research. The time

is right for such debate: most parties competing in the elections are demanding more democratic participation and transparency in EU decision-making, and this is the first time candidates have been named to run for Commission president.

Maybe the EU will take this opportunity to become more open to ideas from people outside Brussels. Or maybe it will return to business as usual and elaborate further on the predetermined ERA priorities.

Something to add? Email comment@ ResearchResearch.com 'Universities are not being supported in their efforts to develop innovation ecosystems.'

letter from washington

Falling flat

The reaction to the Obama administration's request for below-inflation funding increases for major research agencies has been tepid, reports **Rebecca Trager**.

The ink was barely dry on President Barack Obama's budget request for fiscal year 2015 when the Republican chairman of the House of Representatives' budget committee, Paul Ryan, called it "another disappointment" that "reinforces the status quo".

The research lobby was equally dismissive. "The budget is dead on arrival," says Barry Toiv, spokesman for the Association of American Universities. "Clearly there will be significant changes—how research agencies and programmes will be treated remains to be seen."

Whatever figures are in place by the end of the appropriations process, research agencies are unlikely to see any improvement on the small real-terms decline in the administration's request, released on 4 March. This calls for increases of about 1 per cent or less for the National Institutes of Health, the National Science Foundation, the Department of Energy's Office of Science and NASA. In FY2014, the eventual sums were a few percentage points below Obama's initial request.

Federal funding for basic research would fall by about 1 per cent, or \$330 million (€237m), to \$32.08 billion. Spending on applied research would rise by 1.8 per cent to \$32.6bn. Inflation stands at about 1.7 per cent.

White House science adviser John Holdren told a budget briefing that the proposal involved many "tough choices", but added that science and technology had done well relative to other areas. "These average increases are plainly modest, but are nonetheless much better than the overall increase in discretionary spending, which is 0.2 per cent," he said. The administration has also pointed out that it had to comply with the spending caps included in December's bipartisan budget deal.

The budget also contains an attempt to boost science spending by the back door. Along with his regular

budget request, Obama submitted to Congress a proposal for a "fully paid for" \$56bn Opportunity, Growth and Security Initiative incorporating \$5.3bn for R&D. This fund, which would require separate approval from Congress, would provide an additional \$970m for the NIH, \$552m for the NSF and \$886m for NASA. The White House estimates that the

initiative would enable 650 additional grants at the NIH and 1,000 at the NSF. Kathy Hudson, the NIH's deputy director for science, outreach and policy, said the agency would use \$280m of the extra funding to offset last year's automatic sequestration cuts.

Few observers, however, think researchers will ever get their hands on the extra money. A spokesman for the American Society for Biochemistry and Molecular Biology said that the fund relied on \$56bn in tax loopholes being closed. "It doesn't exist to be spent, and certainly won't pass Congress," he said. Toiv says that the initiative exists mainly to show the opportunities being missed because of austerity measures.

Some of the smaller federal science programmes and agencies fare well in Obama's budget proposal—perhaps because relatively modest sums can make a large difference to their work.

Funding for patient-centred outcomes research would increase by 13.8 per cent, rising to \$528m; the Department of the Interior's research budget would jump by 10.1 per cent to \$925m; funding for research at the National Oceanic and Atmospheric Administration would go up by 4.1 per cent to \$688m; and the budget for the National Institute of Standards and Technology's intramural laboratories would increase by 3.4 per cent to \$690m.

Ryan's committee will respond with the Republicans' proposal next month. The equivalent committee in the Democrat-led Senate plans to accept the budget, moving on to the appropriations process. Last week, the two parties' members on the House of Representatives' Committee on Science, Space and Technology also released bills to reauthorise the America COMPETES Act. Democrats would authorise 5 per cent annual budget rises for the NSF; Republicans would authorise 1.5 per cent rises.

Anxiety about America's scientific future has been fuelled by a report published last month by the National Science Board, the NSF's policy-making body. This found that the share of the world's R&D performed in the United States has fallen steeply since 2001, dropping from 37 to 30 per cent. At the same time, the share performed by Asian countries has grown from 25 to 34 per cent.

"The rest of the world has caught up, and what we are doing now is saying that we can't afford to compete," says Michael Lubell, the American Physical Society's director of public affairs. "The White House doesn't want to fight the battle right now; this is the easiest path forward." More to say? Email comment@ResearchResearch.com

'The rest of the world is catching up with the US, which is saving it can't afford to compete.'

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highlights

Issue no. 383

EU robot experiments

ECHORD++ invites proposals for its open call for experiments. Each experiment will receive approximately €300,000 [21].

EU road infrastructure

ERA-Net Plus Infravation invites applications for its transnational call for proposals on advanced systems, materials and techniques for next generation road infrastructure. Grants are worth up to €1.5 million [37].

EU influenza vaccination

The European Centre for Disease Prevention and Control invites tenders for monitoring vaccine effectiveness during seasonal and pandemic influenza in the EU/EEA. The budget is up to €4 million [39].

Engineering prize

The Royal Academy of Engineering invites nominations for the Queen Elizabeth prize for engineering. The prize is worth £1 million (€1.2m) [57].

Motor neurone disease

The Motor Neurone Disease Association invites outline applications for its project grants. Grants are worth up to £255,000 (€304,900) [61].

NOT TO BE PHOTOCOPIED

deadlines

Opportunities from previous issues of *Research Europe*, listed by closing date. European Commission and associated funders marked **EU**.

Each entry is followed by a Web id

March

20 UK Action on Hearing Loss translational research initiative for hearing funding scheme grant *1175049*

DE ERA-Net CORNET 17th transnational call 1158495

DE ERA-NET EraSME 14th transnational call 1173221

EU European Food Safety Authority traineeships 1177496

EU European Science Foundation European cooperation in the field of scientific and technical research (COST) open call 200543

TR Sabanci University Sakip Sabanci international research award 151804

FR Yves Cotrel Foundation research grants 150792

- 30 IT European University Institute senior fellowships 207344
- 31 MY Academy of Sciences Malaysia Mahathir science award 1166691

UK Antarctic Science career development bursary 202571

DE Bayer from targets to novel drugs grants *254984*

UK British Pharmacological Society postdoctoral support 198033

UK Centre for Economic Policy Research exploratory grants 1165770

FR CNES (French Space Agency) research grants 189480

EU Directorate-General for Trade trade sustainability impact assessment in support of negotiations of a comprehensive trade and investment agreement between the European Union and Japan 1177659

EU ERA-Net ERA-IB/ERA-Net EuroTransBio joint call for proposals 1158107

EU ERA-Net ERASynBio third twinning call 1176818

EU European Centre for Disease Prevention and Control systematic literature review on interventions for tuberculosis prevention and control in hard to reach and vulnerable populations 1177918

CH European League Against Rheumatism scientific training bursaries *254719*

UK European Society for Organ Transplantation junior basic science grant 198187

UK European Society for Organ Transplantation junior clinical research grant 198176

UK European Society for Organ Transplantation short stay and study grant 213204

DE European Union – Latin America and Caribbean Foundation open call for research projects 1175265

IT European University Institute Sørensen grants 1177578

FR Fondation Maison des Sciences de l'Homme fellowships for postdoctoral researchers *1161858*

UK Institution of Mechanical Engineers James Clayton prize 252788

FR International Agency for Research on Cancer postdoctoral position in section of molecular pathology 1172618

DE International Society for Heart Research fellowship 259747

JP Japanese Federation of University Women international fellowships 201198

EU JPI A Healthy Diet for a Healthy life European nutritional phenotype assessment and data sharing initiative 1177580

SG Singapore National Research Foundation fellowship *1159434*

KE UN-HABITAT Dubai international award for best practices 260326

FI World Institute for Development Economics Research of the United Nations University PhD internships 255523

UK The Zoological Society of London evolutionarily distinct and globally endangered fellowships

CH Zurich-Basel Plant Science Center international postdoc fellowship programme in plant sciences 1172987

April

1 **DK** Association of European Operational Research Societies general support funds *1167699*

EU ERA-Net SUSFOOD joint call for proposals 1171973

EU European Centre for Disease Prevention and Control best practices for climate change adaptation to infectious diseases 1177955

EU European Centre for Disease Prevention analysis of environmental drivers of infectious diseases 1177956

Search

europe

Clinical research prize

The United European Gastroenterology invites applications for its research prize. This recognises excellence in basic science, translational or clinical research within gastroenterology. The award is worth €100,000.

Web id: 1173475

Email: v.marlovits@medadvice.co.at

Deadline: 18 May 2014 [1]

Neuro-oncology

The European Association of Neuro-Oncology invites applications for the following awards:

•educational visit grant, worth up to €3,000. **Web id: 1169317**

•travel grants, worth up to €1,000. **Web id: 1178319**

•fellowship programme, worth up to €31,000. **Web id: 1169314**

Email: office@eano.eu
Deadline: 19 May 2014 [2]

Plastic surgery prize 1

The European Association of Plastic Surgeons invites applications for its young plastic surgeon scholarships. These fund a one- or three-month fellowship in a European centre of plastic surgery or in a department run by a EURAPS member. Awards are worth up to €3,500.

Web id: 209847

Email: euraps@mediuniwien.ac.at Deadline: 1 December 2014 [4]

Plastic surgery prize 2

The European Association of Plastic Surgeons invites applications for the Hans Anderlaward. This promotes excellence in the field of plastic surgery in Europe and recognises outstanding achievements in the field of plastic-reconstructive and aesthetic surgery. The prize is worth approximately €4,000.

Web id: 209843

Email: euraps@meduniwien.ac.at Deadline: 31 December 2014 [5]

EU economics fellowships

The Directorate-General for Economic and Financial Affairs invites tenders for its fellowships. These enable scholars to map out the new economic normal in the context of reshaped economic policy frameworks and governance designs. Fellowships are worth €15,000.

Web id: 1178287

Email: ecfin-fellows-2014@ec.europa.eu Deadline: 6 April 2014 [6]

EU research funding

The Joint Research Centre invites tenders for an analysis of national public research funding, by theme and type of allocation. The tenderer will collect and update data on the allocation of national public research funding as well as develop analytical reports based on the collected data. Funding is worth up to €400,000.

Web id: 1178162

Email: jrc-b5-bxl-finance@ec.europa.eu
Deadline: 15 April 2014 [8]

Online Funding Search

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Online subscribers can view full details of any funding opportunity by simply searching for the Web id number as free text in a funding search.

Funding search

Free text: 1234567

For subscriptions call +44 20 7216 6500

EU cohesion policy

The Directorate-General for Regional and Urban Policy invites tenders for the following:

•an ex post evaluation of cohesion policy programmes 2007-2013 financed by the European Regional Development Fund and Cohesion Fund work package 1: synthesis report, worth up to €1.5 million. Web id: 1178123

•an ex post evaluation of cohesion policy programmes 2007-2013 financed by the European Regional Development Fund and Cohesion Fund work package 2: support to SMEs – increasing research and innovation in SMEs and SME development, worth up to €1m. Web id: 1178125

Email: regio-b2-head-of-unit@ec. europa.eu

Deadline: 22 April 2014 [9]

EU drug offences

The Directorate-General for Justice invites tenders for a study on alternatives to coercive sanctions as response to drug law offences and drug-related crimes. The tenderer will provide an overview of all member states' practice in applying alternatives to coercive sanctions as response to drug law offences and drug-related crimes. The contract is worth €200,000.

Web id: 1178325 Email: iust-a4-cft@ec.europa.eu Deadline: 12 May 2014 [11]

EU sustainable urban projects

The Directorate-General for Development and Cooperation invites concept notes for supporting the Southern Neighbourhood Partnership cities in the implementation of sustainable urban demonstration projects. This enables local authorities in European Neigbourhood and Partnership Instrument South partner countries to address changes related to energy. Awards are worth up to €1 million.

Web id: 1178086

Email: europeaid-sudep-call-135429@ ec.europa.eu

Deadline: 23 May 2014 [13]

Surgical oncology training

The European Society of Surgical Oncology invites applications for its training fellowships. These enable young surgeons to visit a specialist centre outside of their own country to expand their experience and learn new techniques. Fellowships are worth up to €10,000.

Web id: 189865 **Deadline: 10 November 2014** [14]

Dystonia award

The European Dystonia Federation invites submissions for the David Marsden award. This encourages research into dystonia in all European countries, especially by young scientists. The award is worth €10,000.

Web id: 183502 Email: sec@dystonia-europe.org Deadline: 31 March 2015 [16]

Neurology cooperation

The European Federation of Neurological Societies invites applications for its department to department cooperation programme. This allows researchers to visit other departments for six weeks or longer. Grants are worth up to €1,800. Web id: 190976

Email: pragueoffice@efns.org Deadline: 30 November 2014 [17]

Humboldt awards

The Alexander von Humboldt Foundation invites applications for the following awards:

•the Humboldt research fellowships for experienced researchers, worth up to €71,100. Web id: 259147

•the Humboldt research fellowships for postdoctoral researchers, worth up to €82,800. **Web id: 168240**

Email: info@avh.de No deadline [18]

Diabetes travel fellowship

The European Foundation for the Study of Diabetes invites applications for the Albert Renold travel fellowships. These enable young scientists to visit other laboratories to learn different scientific techniques. Awards are worth up to €8,000.

Web id: 205252 Email: foundation@easd.org No deadline [20]

EU robot experiments

ECHORD++ invites proposals for its open call for experiments. This supports small-scale projects using state-of-theart robotic equipment. Projects should address: cognitive tools and workers for cognitive factories; general purpose robotic co-workers; cognitive logistics robotics for industry; medical robotics; agricultural and food robotics. Each experiment will receive approximately €300,000.

Web id: 1178223 Email: info@echord.eu Deadline: 14 April 2014 [21]

Natural heritage awards

The Europarc Foundation and the Alfred Toepfer Foundation in Hamburg invite applications for the Alfred Toepfer natural heritage scholarships. These enable young conservationists with practical experience in the field of conservation to undertake a study visit to one or more protected areas in another European country. Awards are worth €3,000.

Web id: 192399 Email: office@europarc.org Deadline: 1 May 2014 [22]

Microvascular complications

The European Foundation for the Study of Diabetes, with financial support from Novartis, invites applications for its European research programme in microvascualar complications of diabetes. This supports European basic and clinical research in this field. Grants are worth up to €100,000.

Web id: 1172958 Email: foundation@easd.org Deadline: 15 July 2014 [23]

Immunology prize

The European Federation of Immunological Societies and Immunology Letters invites nominations for the Ita Askonas prize. This recognises female group leaders in immunology who have run an independent laboratory for between four and eight years. The award is worth €20,000, plus travel expenses.

Web id: 1177168 Email: hahner@efis.org Deadline: 1 March 2015 [24]

Eastern Europe fellowships

The International Visegrad Fund invites applications for the Visegrad scholarships at the open society archives. These enable investigators to conduct research at the Open Society Archivum in Budapest in the areas of soviet societies and socialism. Scholarships are worth €2,000.

Web id: 1169908 Email: gadoros@ceu.hu **Deadline: 10 April 2014** [25]

EU ESF carbonate mounds

The European Science Foundation, under the cold-water carbonate mounds in shallow and deep time European research network programme (COCARDE-ERN), invites applications for its short visit grants. These intend to foster collaborations between European researchers working on topics related to the programme. Grants are worth up to €1,775.

Web id: 1165786 Email: cocarde@esf.org No deadline [26]

EU animal feed additives

The European Food Safety Authority invites tenders for a review of immune stimulator substances and agents that are susceptible of being used as feed additives: mode of action and identification of end-points for efficacy assessment. Tenderers will collect, collate and synthesise scientific data on food-producing major species, related minor species and nonfood-producing animals. The maximum budget is €80,000.

Web id: 1178242

Email: repro.grants.and.procurements@

efsa.europa.eu

Deadline: 16 April 2014 [27]

EU agricultural policy

The European Commission Joint Research Centre invites tenders for a framework service contract for the provision of thematic studies in the field of agrienvironment. The tenderer will quantify, assess and monitor the evolution of agri-environmental conditions as well as provide pathways for agri-environmental policy developments. The contract is worth up to €700,000.

Web id: 1178139

Email: jrc-ies-procurement@ec.europa.eu Deadline: 17 April 2014 [28]

EU data management

European Food Safety Authority invites tenders for its data management scheme. The tenderer will test and implement electronic submissions in XIM format of zoonoses, antimicrobal resistance and food-borne outbreak data and update historical datasets. The overall budget available is €400.000.

Web id: 1178310

Email: rasa.procurement@efsa.europa.

Deadline: 30 April 2014 [29]

EU genital mutilation

The European Institute for Gender Equality invites tenders for a study on female genital mutilation in selected EU member states. The tenderer will estimate the number of women and girls at risk. The contract is worth €200,000.

Web id: 1178318

Email: procurement@eige.europa.eu Deadline: 28 April 2014 [30]

Endocrinology fellowship

The European Society for Paediatric Endocrinology invites applications for its clinical fellowship. This promotes the development of patient care, clinical management and clinical research in paediatric endocrinology through a training programme in a European clinical centre. Web id: 183347

Email: rasa.verkauskiene@ kaunoklinikos.lt **Deadline: 31 May 2014** [31]

Haematology exchange

The European Hematology Association and the Japanese Society of Hematology invite applications for their fellowship exchange programme. This provides opportunities for scientists or clinicians to visit research institutes or hospitals to facilitate and strengthen collaborations and networking. The recipients will receive a total of €10,000 or ¥1 million.

Web id: 1167325 Email: a.steuten@ehaweb.org **Deadline: 5 April 2014** [33]

Statelessness research

Tilburg University and the UN High Commissioner for Refugees invite nominations for their statelessness research award. This recognises outstanding student research in the field of statelessness. The award budget is €3,000.

Web id: 1178228

Email: statelessness.programme@

tilburguniversity.edu Deadline: 1 May 2014 [34]

Chemical innovation

The Netherlands Organisation for Scientific Research's Division of Chemical Sciences (NWO CW), in collaboration with Technology Foundation STW, invites applications for its new chemical innovations chemical industrial partnership programme call. This funds national or international public-private cooperation of one company with at least two knowledge institutes on research topics from all chemical sub-disciplines. The total budget is €20 million and the minimum grant is €160,000.

Web id: 1177161 Email: m.dezwart@nwo.nl Deadline: 8 May 2014 [35]

Paediatric diseases

The European Society for Paediatric Infectious Diseases invites applications for its training courses and workshop awards. Events may be directed at clinical trainees, continuing medical education for career grade doctors, or both. The awards are worth up to €16,000.

Web id: 254898 Email: espid@kenes.ch Deadline: 31 May 2014 [36]

EU road infrastructure

ERA-Net Plus Infravation invites applications for its transnational call for proposals on advanced systems, materials and techniques for next generation road infrastructure. This supports innovations that address the challenges identified in the European Commission's white paper on transport: smart, green and integrated transport. Grants are worth un to €1.5 million.

Web id: 1178122

Email: david.doerr@de.tuv.com Deadline: 30 June 2014 [37]

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Medicine development

The Tres Cantos Open Lab Foundation, with funding from Marie Curie Actions, invites applications for its cofund fellowship programme. This enables scientists to access resources and facilities of the host institution GlaxoSmithKline's Tres Cantos Medicines Development Campus and work alongside GSK scientists to develop their research projects. Funding will cover personnel costs and accommodation

Web id: 1175704

Email: info@openlabfoundation.org **Deadline: 25 June 2014** [38]

EU influenza vaccination

The European Centre for Disease Prevention and Control invites tenders for monitoring vaccine effectiveness during seasonal and pandemic influenza in the EU/EEA. The tenderer will assess overall and product-specific influenza vaccine effectiveness as well as vaccination programme specific effectiveness. The budget is up to €4 million.

Web id: 1178305

Email: procurement@ecdc.europa.eu Deadline: 16 April 2014 [39]

Forestry research

Nordic Forest Research, in collaboration with the North European Regional Office of European Forest Institute, invites applications for grants to support networking activities. These aim to establish better contact between the forest research communities in the Nordic, Baltic Sea and the North Atlantic regions, to build links between the North European Region and the European Forest Institute and to add a European dimension to Nordic forest cooperation. Grants are worth up to €25,000.

Web id: 186044

Email: bodeker.sns@slu.se **Deadline: 28 May 2014** [40]

Mobility grant

Region Västra Götaland invites applications for its mobility for regional excellence programme. This fosters international collaboration between research and innovation milieus in Västra Götaland, Sweden and abroad. Funding will cover salary, travel, increased living costs, research and training activities.

Web id: 1178189

Email: lisa.belfrage@vgregion.se Deadline: 1 September 2014 [41]

Lumbar spine research

The International Society for the Study of the Lumbar Spine invites applications for the following awards:

- clinical travelling fellowship. Web id: 1178017
- •the MacNab/LaRocca research fellowship, worth US\$15,000 (€10,800). Web id: 204045
- •the Wiltse lifetime achievement award, worth US\$10,000.

Web id: 204094

Email: katarina.olinder@gu.se Deadline: 1 February 2015 [42]

Water management

Swiss Reinvites submissions for its international ReSource award for sustainable watershed management. This recognises leadership in implementing the principles of sustainability in watershed management. The award is worth up to US\$150,000 (€107,800).

Web id: 1166537

Email: stefan.huber@resourceaward.org **Deadline: 30 April 2014** [46]

Bone research

The International Bone Research Association invites applications for the Robert Schenk research prizes. Two prizes are awarded for research advancements in bone biology and the internal fixation of hand and neck or limbs. The awards are worth CHF15,000 (€12,400).

Web id: 199508 Email: info@ibra.ch

Deadline: 31 January 2015 [47]

Exchange awards

The European Society for Paediatric Gastroenterology, Hepatology and Nutrition invites applications for its international exchange programme. This supports international collaboration for members who wish to acquire clinical or research skills not available in their country of origin. The award is worth €2,000.

Web id: 1169286

Email: espghanho@mci-group.com No deadline [48]

Genital mutilation

The Department for International Development invites tenders for its research programme toward ending female genital mutilation and cutting in Africa and beyond. This supports projects that aim to reduce and eventually eliminate the practice. The budget is £8 million (€9.6m).

Web id: 1178304

Email: p-graham@dfid.gov.uk Deadline: 4 April 2014 [49]

Cancer research projects

The Association for International Cancer Research invites applications for its project grants. These support fundamental and translational research into the causes, mechanisms, diagnosis, treatment and prevention of cancer.

Web id: 252081

Email: enquiries@aicr.org.uk Deadline: 25 April 2014 [50]

Paediatric endocrinology

The European Society for Paediatric Endocrinology invites nominations for its visiting scholarships. These enable ESPE members or their collaborators to gather information and experience on a specific research issue or on a laboratory technique in the field of paediatric endocrinology. Scholarships are worth €2,500.

Web id: 201519

Email: espe@eurospe.org Deadline: 30 April 2014 [51]

Fish biology research

The Fisheries Society of the British Isles invites applications for the Wyn Wheeler research grant. This enables members to continue their research following retirement from full-time employment. The budget for this call is £6,000 (€7,200).

Web id: 206200 Email: admin@fsbi.org.uk

Deadline: 1 May 2014 [52]

Drug discovery

The Wellcome Trust invites applications for its seeding drug discovery scheme. This aims to develop drug-like, small molecules that will be the springboard for further research and development by the biotechnology and pharmaceutical industry in areas of unmet medical need. Funding is available for directly incurred costs for up to four years.

Web id: 253953

Email: techtransfer@wellcome.ac.uk **Deadline: 11 June 2014** [54]

Surgical research

The Royal College of Surgeons of Edinburgh invites applications for its small research grants. These support pumppriming projects in surgical translational research, surgical health services research, research into surgical aspects of patient safety, simulation and nonoperative technical skills and cancer research of demonstrable direct clinical relevance to the management of solid tumours. Grants are worth up to £10,000 (€12,000).

Web id: 255235

Email: c.mccartney@rcsed.ac.uk Deadline: 27 June 2014 [55]

Child development

The Waterloo Foundation invites applications for its child development grants. These focus on factors that sufferers of co-occurring neurodevelopmental conditions can influence. Up to £50,000 (€59,700) is available.

Web id: 1164409

Email: info@waterloofoundation.org.uk Deadline: 4 July 2014 [56]

Engineering prize

The Royal Academy of Engineering invites nominations for the Queen Elizabeth prize for engineering. This recognises groundbreaking innovations that have been of global benefit to humanity. The prize is worth £1 million (€1.2m).

Web id: 1165339 Email: info@qeprize.org **Deadline: 14 July 2014** [57]

Physiology research

The Physiological Society invites applications for its international senior research grant. This enables recipients to visit a sponsor's lab and carry out further research upon return to their home institution. Grants are worth £7,000 (€8,400).

Web id: 1171617

Email: education@physoc.org Deadline: 1 September 2014 [58]

Metabolic disease

Children Living with Inherited Metabolic Diseases invites applications for its research grants. These support research in propionic acidaemia and its relation to inherited metabolic diseases. Grants are worth up to £15,000 (€18,000).

Web id: 255643 Email: grants@climb.org.uk **Deadline: 6 October 2014** [60]

Motor neurone disease

The Motor Neurone Disease Association invites outline applications for its project grants. These support single pieces of work designed to answer a single question or a small group of related questions with relevance to motor neurone disease. Grants are worth up to £255,000 (£304.900).

Web id: 253402

Email: enquiries@mndassociation.org Deadline: 31 October 2014 [61]

Arts visiting fellowships

The University of East Anglia's Sainsbury Research Unit for the Arts of Africa, Oceania and the Americas invites applications for its visiting fellowships. These support research on the arts in Africa, Oceania and the Americas. Two fellowships, worth up to £5,502 (€6,600) each, are available. Web id: 206641

Email: admin.sru@uea.ac.uk Deadline: 28 November 2014 [62]

rest of world

Surgical awards

The Royal Australasian College of Surgeons invites applications for the following:

•the Murray and Unity Pheils travel fellowship, worth AU\$10,000 (€6,500). Web id: 213421

• the Stuart Morson scholarship in neurosurgery, worth AU\$30,000 (€19,500). Web id: 180107

Email: scholarships@surgeons.org Deadline: 28 April 2014 [66]

Indian science fellowhsip

The Department of Science and Technology, India invites nominations for the Jawaharlal Nehru science fellowship. This promotes cutting-edge scientific research in centres of excellence in India. US\$100,000 (€72,000) is available to fellows, along with an aggregated research grant of INR5.5 million (€64,700).

Web id: 1178166 Email: dstsec@nic.in No deadline [68]

Korean studies 1

The Academy of Korean Studies invites applications for its research grant. This enables international students to conduct research in Korean studies for six months at the Graduate School of Korean Studies. The grant is worth KRW900,000 (€605).

Web id: 1178232 Email: nylee@aks.ac.kr **Deadline: 10 April 2014** [69]

Korean studies 2

The Academy of Korean Studies invites applications for its thesis grant. This enables international students to further enhance their research in the field. The prize is worth up to KRW3 million (€2,000). Web id: 1178229

Email: nylee@aks.ac.kr Deadline: 30 September 2014 [70]

Chinese studies fellowships

The Chiang Ching-kuo Foundation for International Scholarly Exchange invites applications for its fellowships. These support PhD dissertation and postdoctoral research in Chinese studies. The fellowships are worth up to €36,000.

Web id: 1164811 Email: cckf@ms1.hinet.net Deadline: 15 January 2015 [71]

Medicine/public health

The Prince Mahidol Award Foundation invites nominations for the Prince Mahidolawards. These recognise research in medicine or public health that contributes directly to the betterment of society. Awards are worth US\$100,000 (€72,000). Web id: 1173008

Email: pmaf@mahidol.ac.th Deadline: 31 May 2014 [72]

tenders

Assembled devices ESA*

The European Space Agency invites tenders for its high density interconnect technology and thermount replacement with assembled devices. The tenderer will evaluate at least one printed circuit board manufacturer and assembly company, the HDI technology in combination with low coefficient of thermal expansion laminate and assembled devices. The contract is worth up to €500,000. Ref: 11.1QM.06. Deadline: 11 April 2014

Integrated circuit ESA*

The European Space Agency invites tenders for its evaluation of integrated circuit flow call. The tenderer will evaluate and characterise a common harmonised flow for the design, evaluation and qualification of mixed signal ASICs with the list of preferable foundries and assembly and test houses for mixed signal ASICs, based on space user needs and applications from the preceding ECI-3 proposed activity. The contract is worth at least €500,000. Ref: 13.1QM.25. Deadline: 23 April 2014

Earth observation ESA*

The European Space Agency invites tenders for its earth observation support for Asian development bank projects call. The tenderer will raise awareness within the ADB of the European and Canadian current and future capabilities in EO. Contracts are worth up to €100,000. Ref: 13.155.29. Deadline: 25 April 2014

Acceleration experiment ESA*

The European Space Agency invites tenders for its patterns of acceleration and navigation on board the international space station call. The tenderer will develop and adapt suitable hardware for space, consisting of three 3-axis acceleration and 3-axis angular rate sensors and a data processing unit. The contract is worth at least €500,000. Ref: 13.1GM.02. Deadline: 28 April 2014

Satellite networks ESA*

The European Space Agency invites tenders for its congestion aware end-to-end layers split free satellite network work programme 2013 A1 - 1C.018 call. The tenderer will develop, simulate and propose a standardisation for a mechanism that will improve the performance of the transmission of the internet protocol suite without the use of splitting transmission control protocol performance enhancing proxies. The contract is worth up to €500,000. Ref: 13.1TF.16. Deadline: 15 May 2014

Dialectric filling ESA*

The European Space Agency invites tenders for its dielectric filling techniques for high-power ku-band harmonic filters call. The tenderer will design, manufacture and test two Ku-band harmonic filter breadboard units showing multipactor suppression using dielectric filling techniques. The contract is worth up to €500,000. Ref: 13.1∏.34. Deadline: 28 May 2014

*ESA is at: http://emits.esa.intw

usa

James S McDonnell Foundation collaborative activity awards

Web id: 207552 No deadline [79]

Smithsonian Latino Center Latino museum studies programme

Web id: 1178153 Deadline: 21 April 2014 [80]

American Heart Association council on high blood pressure research conference Web id: 1178188

Deadline: 30 April 2014 [81]

American Heart Association Harriet Dustan award

Web id: 1178155

Deadline: 30 April 2014 [82]

American Heart Association high blood pressure mid-career award

Web id: 1178190 Deadline: 30 April 2014 [83]

American Heart Association Irvine Page and Alva Bradley lifetime achievement award

Web id: 1178202 Deadline: 30 April 2014 [84]

American Heart Association Novartis award for hypertension research

Web id: 114140 Deadline: 30 April 2014 [85]

Medieval Academy of America travel grants

Web id: 208809 **Deadline: 1 May 2014** [86]

American Heart Association competence in aging award

Weh id: 1178157 Deadline: 5 June 2014 [87]

American Heart Association excellence in clinical practice award

Web id: 1178159 Deadline: 5 June 2014 [88]

American Heart Association James B Herrick award in clinical cardiology Web id: 1178161

Deadline: 5 June 2014 [89]

American Heart Association Katherine A Lembright award

Web id: 1178200 Deadline: 5 June 2014 [90]

American Heart Association scientific sessions awards

Web id: 1178180 Deadline: 5 June 2014 [91]

American Heart Association women in cardiology mentoring award

Web id: 1178194 **Deadline: 5 June 2014** [92]

Open Society Foundations fellowship

Web id: 261030

Deadline: 4 August 2014 [93]

Medieval Academy of America John Leyerle-CARA prize for dissertation research Web id: 196067

Deadline: 31 January 2015 [94]

Medieval Academy of America dissertation grants

Web id: 200570

Deadline: 15 February 2015 [95]

Electrochemical Society Charles W Tobias young investigator award

Web id: 182793

Deadline: 1 October 2015 [96]

Electrochemical Society Edward Goodrich Acheson award

Web id: 158424

Deadline: 1 October 2015 [97]

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- Research Data Alliance Summit, Dublin, Ireland. To 28. http://rsrch.co/L5DjXQ
- 27 Cost Workshop on Technology Transfer, Brussels, Belgium. To 28. http://rsrch.co/1bRm9V2
- 28 Conference of Healthy Diet for a Healthy Life Joint Programming Initiative, Brussels, Belgium. http://rsrch.co/1hISVwj

- 2 European Conference on the Future Internet, Brussels, Belgium. To 3. http://rsrch.co/1hilq72
- International Conference on Research Infrastructures. Athens, Greece. To 4. http://rsrch.co/1f0mclD
- 3 EUA Annual Conference, Brussels, Belgium. To 4. http://rsrch.co/1c8WxWn
- 9 Industrial Technologies 2014, Athens, Greece. To 11. http://rsrch.co/1cQi2da
- 10 Academic Cooperation Association: Funding Student Mobility, Brussels, Belgium. http://rsrch.co/1mfHi51
- 14 Transport Research Arena, Paris, France. To 17. http://rsrch.co/xiCe5p
- 23 University-industry Interaction Conference, Barcelona, Spain. To 25. http://rsrch.co/Vjs5Dg

May

- 8 Earto Annual Conference, Vienna, Austria. To 9. http://rsrch.co/1fP3Khu
- 12 Funding Policies and Research Values Workshop, Trieste, Italy. http://rsrch.co/MiG214
- 13 Research Information Systems: Managing Data-intensive Science, Rome, Italy. To 15. http://rsrch.co/19Suz36
- 14 iREG Conference: Employability and Academic Rankings, London, UK. To 16. http://rsrch.co/1htI5sC
- 16 Data-centric Management of Research and Innovation, Rome, Italy. http://rsrch.co/1c0IGR7
- 22 Leru Spring Reception, Brussels, Belgium. http://rsrch.co/1lJxxZ7

- 6 Copyright and the Digital Agenda for Europe, Athens, Greece. http://rsrch.co/1evsBzV
- 10 2nd EUA-AARU Conference on Strengthening Arab-Euro University Collaboration, Amman, Jordan. To 12. http://rsrch.co/10f5s5e

insider

Guidance down the digital road

The European Commission has set up a forum to help businesses make more of the latest digital technology. **Jenny Maukola** explores its remit.

The brothers Carlo and Fioravante Berto set up their own furniture shop in the city of Meda, near Milan, in 1974. Since then, they have transformed their family business, Berto Salotti, into a thriving global firm.

Unlike many family business owners in Europe, the Berto brothers have been adroit at using digital technologies in advertising and to engage clients. Through their YouTube channel, for example, customers can follow the manufacturing process of their personalised sofa beds. And their Twitter feed displays a wide range of unusual furniture designs such as Jacuzzi-sofas.

The benefits of using technology to connect with people are obvious. Social media, cloud computing and data analytics can all help start-ups to grow and large, traditional businesses to keep up with the times.

Last month, to encourage more businesses to take the digital road, the Commission launched a Strategic Policy Forum on Digital Entrepreneurship. The forum, comprising 40 members representing industry, academia and policymakers, will think of ways in which businesses of all sizes can grow through using digital technologies.

"Businesses that use such technologies grow faster, employ more people more quickly and are just more successful than those that don't," says John Higgins, president of the forum and director-general of Digital Europe, a Brussels-based lobby group representing digital companies. "The point of this forum is to increase the appetite in Europe to be entrepreneurial."

The forum will consider how to make it easier for prospective entrepreneurs to start businesses based on digital technology, as well as how to transform established businesses, says Axel Pols, managing director of the European Information Technology Observatory, a Berlin-based consultancy.

The first meeting of forum members was held on 28 February in Brussels. Over the next two years, they will try to identify the factors holding digital entrepreneurs back and devise a plan, with policy recommendations and guidelines for the EU and national governments, for what should be done to remove such barriers.

An interim report on the major challenges and how to address them is expected by the end of the year, with a more in-depth report due in 2015.

But with 40 participants representing different interests, the working group's initial agenda is very broad. Reinhilde Veugelers, an innovation specialist at KU Leuven, a university in Belgium, says this makes sense: "If we focus on particular areas too quickly it might impede the systemic perspectives we need to take," she says.

She adds, however, that it will later be necessary to focus on specific sectors and pinpoint exactly what it is that blocks the development and use of digital technologies in different contexts. "Otherwise we'll be talking about the single market in very broad terms," she says. "We need to take an evidence-based approach, looking at how digital technologies are used in particular markets."

Berto Salotti has already teamed up with 18 other small Italian producers to spread the word about Italian design. The resulting project, Design-Apart, is based in New York. It is a "living showroom" that incorporates advanced technology with Italian traditions, offering workshops on 3D printing and sofa crowdcrafting on top of traditional furniture sales. The idea of the forum is to identify such approaches and figure out how to widen their application.

Several different directorates in the Commission will need to be involved, participants say. The Directorate-General for Enterprise and Industry is coordinating the effort, but the DGs for communication and taxation will also be called in. "It's natural that DG Enterprise and Industry is taking the lead, because it's really focusing on how we can leverage entrepreneurship," says Veugelers. "But it's very important that major instruments for policy-making at the European

level also go to other DGs."

Higgins adds that while the forum takes measures to recommend policy at the European level, other activities will happen on the ground. "With this sort of work, things happen in Oslo or Copenhagen, not in Brussels," he says. "It's not a group of policy wonks in Brussels; this is drawing from all over Europe, from Estonia to Portugal."

Something to add? Email comment@

Something to add? Email comment@ ResearchResearch.com 'Social media, cloud computing and data analytics can all help start-ups to grow.'

uk & ireland

UK publishers defend 'dysfunctional' market for hybrid journals

The UK's Publishers Association has rejected claims that the market for hybrid open-access journals is being spurned by academics, saying that some of its members have reported a surge in demand for this model of publishing.

Concerns about hybrid journals, in which only some of the articles are open access, are recorded in the report *Developing an Effective Market for Open Access Article Processing Charges*. This was commissioned by a consortium of funders including Research Councils UK, Austria's FWF science fund, Luxembourg's National Research Fund and the UK's Wellcome Trust, which funds the fully open-access journal *eLife*.

The report, published on 12 March, cites a study from 2012 that showed that a maximum of 2 per cent of the papers in hybrid journals demanding an article processing charge of \$3,000 (€2,150) were open access. Open-access articles in hybrid journals cost significantly more to publish than those in fully open-access journals, and authors are very sensitive to these costs, the report says. This is especially true when authors have to meet the costs "from their own or their university's limited discretionary funds as well as from allowable project costs in research grants". The authors

by Adam Smith

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conclude that, unlike the fully open-access market, the hybrid open-access market is "highly dysfunctional".

The Publishers Association's chief executive Richard Mollet told *Research Europe*'s sister publication *Research Fortnight* that the uptake of open access in some hybrid journals had increased threefold since April 2013. But Michael Jubb, director of the UK's Research Information Network, notes that "those increases are from a low base".

Mollet acknowledges that his evidence is anecdotal and that the association has yet to collect data to counter the claims. "I think in response to this study we might do that," he says.

The report's authors outline three scenarios for APC-funded open access. The first is based on offsetting an institution's journal subscription costs by the amount the institution pays the publisher in APCs. In the second, funders would contribute a portion of an APC up to a proportionate amount based on a measure of the quality of the journal. The third scenario would involve funders paying a set percentage of the APC, with the authors or institutions paying the rest.

uk&i in brief

UK commits to ESS

The Department for Business, Innovation and Skills will spend £165 million (€197m) on

the European Spallation Source based in Sweden, in exchange for Swedish investment in the UK neutron source Isis. It will also invest £100m in the Square Kilometre Array and £25m in the European Space Agency's Plato mission to find planets orbiting stars. The money will come from a pot of £1.1 billion set aside in 2013 for capital spending.

Call for UK defence research council

The Ministry of Defence should carry out forward-looking research, according to the Defence Scientific Advisory Council. The advisory council, a non-departmental body comprising scientists and engineers from industry and academia, recommended that the MoD commit £150 million (€179m) to opportunity-led research that could be managed and distributed by a defence research council.

Cameron targets Internet of Things

Prime Minister David Cameron has announced £45 million (€54m) for research into the Internet of Things, and asked the government's chief scientific adviser to review how the UK can exploit its potential. Speaking at

the CeBIT technology trade fair in Hannover, Germany, Cameron also highlighted the potential of 5G technology.

Leaky pipeline to academia highlighted

A Royal Society report on diversity in the UK has found that substantially fewer people identify themselves as being from black and ethnic minority groups in senior academic positions than among undergraduates. In the biosciences, 4 per cent of professors are from black and ethnic minority groups, compared with 24 per cent of undergraduates. For physics the corresponding gap is 6 per cent, and for clinical medicine it is 22 per cent.

Hi-tech start-ups to create 1,850 jobs

The 122 technology-based companies created in 2013 with support from Enterprise Ireland's High-Potential Start-Ups programme are expected to create 1,850 jobs in Ireland in the next three years and generate significant export revenues. The target was announced by Richard Bruton, minister for jobs, enterprise and innovation.

Top diplomat elected president of Welsh society

The UK's former ambassador to the UN is to be the next president of the Learned Society of Wales. Emyr Jones Parry served on the UN Security Council from 2003 to 2007 and negotiated more than 250 resolutions.

nations

Resignations follow Croatian funding merger

The steering committee of Croatia's Unity Through Knowledge Fund has stepped down following an announcement that the fund is to be incorporated into the Croatian Science Foundation.

Croatia's science ministry said the merger would ensure the fund's future "sustainability". The foundation, which is the central body for project-based research, will be responsible for managing the fund's programmes, effectively meaning that the country will have only have one funding organisation.

Scientists in Croatia, however, fear that the fund's successful track record will be diluted. The fund, which is financed by the World Bank, is seen as a rare example of excellence in research funding in the region.

On 25 February, the nine departing members of the fund's steering committee said: "Despite its relatively limited financial contribution, the fund has become an example of good practices and successful mechanisms of scientific funding in and outside Croatia."

Following its launch in 2007, the fund received 39 million Croatian kuna (€5m) from the World Bank and 67 million kuna from Framework 7, as well as further funding from industry. From 2007 to 2012, the projects it funded produced 312 scientific papers.

nations in brief

France to introduce talent passport for skilled workers

The French government has announced plans to help highly

skilled people from other countries, including researchers, to immigrate. The "talent passport" initiative, expected to be in place by early next year, will enable skilled workers to get four-year, renewable visas for themselves and their families. As well as scientists, the government hopes to attract people with international reputations in literature, education and sports.

Cost-cutting ocean fleet agreed

Spain's ministry of economy and competitiveness, council for scientific research and institute of oceanography have agreed to co-manage 12 vessels to streamline spending on oceanographic research. The Flotpol fleet will bring together various publicly owned or operated vessels, with the aim of generating savings of €15 million between 2015 and 2020.

Germany extends university audits

The German research ministry is to continue supporting assessments of the international profile of higher education institutions, after receiving positive feedback. The audits, which began in 2011, will carry on until 2016. This will allow a further 36 institutions to be assessed, on top of the 42 already examined.

by Mico Tatalovic

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A second World Bank loan was signed in 2013. But a call scheduled for this year had to be cancelled as it clashed with similar calls from the national science foundation, according to Kristian Vlahovicek, a member of the steering committee and a molecular biologist at the University of Zagreb.

The science ministry maintains that the fund's programmes are "continuing to be actively implemented". A €1.2m programme is being prepared, which will complement the 18 projects, worth a total of €2.9m, that are ongoing.

Vlahovicek says there will be competition and overlap between the merged organisations' projects. Scientists involved in running the fund could also be faced with a conflict of interest when applying for what will now be the only source of national research funding. "You don't make a fund more sustainable by tying its hands and putting it under a structure that is its direct competition," Vlahovicek says.

The science ministry, however, said the merger would support the "synergistic coordination" of programmes in a single fund.

France Biotech targets pharmaceutical links

Helping members to increase links with large pharmaceutical companies is a major priority for the industry association France Biotech, according to its incoming president. Speaking in Paris on 6 March, Pierre-Olivier Goineau said the association would also work on ensuring sustainable funding streams for the life sciences and removing barriers that prevent its members from accessing European funding programmes.

Brain Prize winners announced

Three neuroscientists, from France, Italy and the UK, have each received €1 million as winners of the 2014 Brain Prize, the largest global prize for brain research. The recipients were recognised by Denmark's Grete Lundbeck European Brain Research Foundation for their research into reading skills, mathematical ability, social interaction and motivations for behaviour.

Germany reaches international-student high

The number of international students in Germany topped 300,000 for the first time in early 2014, increasing by 6.6 per cent from 2013. Figures provided by the German Academic Exchange Service (DAAD) show that the number of international students is increasing faster than the number of domestic undergraduates. The government's aim is to increase the number of international students to 350,000 by 2020.

nordic

Single university law should replace 'nonsense' rules, say rectors

Finland's higher education laws should be unified to boost competitiveness and collaboration between universities of applied sciences and research universities, according to an association of rectors.

The group of rectors of Finnish applied-science universities, Arene, says that having a single law for all institutions would help to reduce administrative costs. This would free up money and resources that could be used to improve research and teaching at both types of institution, making them more competitive.

Traditional universities and universities of applied sciences are governed by two separate laws on course content and teaching methods. This prevents traditional universities from teaching more practical skills in their degrees, rectors say.

Anneli Pirttilä, deputy chairwoman for Arene, says there should not be a strict separation between the types of course taught by each. She explains that the boundaries have already become blurred, and that traditional universities and universities of applied sciences work together on many tasks.

Creating a single law to govern the activities of the two types of institution would mean eradicating some by Jenny Maukola

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"nonsensical" rules about courses such as languages, Pirttilä says. "We are allowed to share a library, but not to jointly teach a first-year course on Mandarin Chinese."

A higher education law that changes how universities of applied sciences are funded in Finland came into effect at the beginning of this year. These institutions now receive money solely from central government, whereas previously both central and local authorities were responsible for their funding.

This change in the law has prompted Arene to propose further amendments. However, students at Finland's universities of applied sciences are not all enthusiastic at the prospect of any more revisions to the legislation.

The Samok union of students in universities of applied sciences said that additional legislative changes would draw attention away from the problems these institutions have with teaching quality, and that having separate laws is not a problem in itself. "Most of the problems that Arene has brought to our attention could be dealt with through the two separate laws," says Mikko Vieltojärvi, an adviser at Samok.

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Life-saving measures for life sciences

Sweden has traditionally had a lot to offer in the life sciences: excellent researchers, plentiful public spending on healthcare and a dynamic



industry. Yet the country is sliding down the global rankings in the field.

From fourth place for global research quality in the life sciences 20 years ago, Sweden has dropped to eighth, according to a study conducted by the country's research council Vetenskapsrådet. And the number of employees in Sweden's life science industry decreased by 4,000 between 1998 and 2012.

Anna Sandström, senior adviser at the innovation funding agency Vinnova, puts this down to large pharmaceutical companies cutting staff and shutting down R&D and production units. "Companies are putting more emphasis on collaborating with academia, small companies and other large pharmaceutical companies," she says.

External R&D partnerships can help industry to cut costs and access expertise, but these benefits may not materialise if the research results are not channelled through to end users. There has been a steady decline in clinical trials in Sweden since 2007, and the connection between industry, research and healthcare has weakened.

Anna Nilsson Vindefjärd, secretary-general of Research!Sweden, an independent organisation that

by Jenny Maukola

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advocates medical research, says more should be done to bring scientists, industry and healthcare professionals together. "We need a healthcare system that is more active in developing treatments and trying them out," she says.

Research!Sweden has proposed a patient-oriented strategy for Sweden's life sciences industry. This would force companies, universities and hospitals to get patients involved, improving the quality of science and resulting treatments. For this to work out, hospitals should be given the incentive of performance-based funding. "Hospitals should be paid not per patient but per result," Vindefjärd says. "The hospital governance should have a more pronounced goal in making use of research results."

A better strategy could also entice companies to stay in Sweden. Each region of the country chooses what healthcare services and products to provide, which leads to fragmentation and makes the market for medical products unpredictable. "Guidelines should be implemented at all levels in Sweden, because otherwise companies won't know if they will be able to sell their products here," says Vindefjärd.

The proposed strategy has won the attention of politicians. In a debate held in parliament in February, Annie Lööf, the enterprise minister, said the government would take the proposal into consideration.

nordic in brief

Staff views matter

The EK confederation of Finnish industries has said that some university funding should be

determined by staff satisfaction surveys. A review commissioned by Finland's education ministry proposed that student feedback surveys should determine 3 per cent of public funding. Responding to this review, the EK said that employee surveys should carry at least equal weight.

Norwegians unhappy with research salaries

Fewer than one in three employees in academia are satisfied with their salaries, according to a survey by Forskerforbundet, Norway's association of researchers. The association found that nearly 9 per cent of employees were extremely unhappy with their pay cheques and 23 per cent were not satisfied.

MA graduates struggle to find jobs

One in three graduates in Denmark who have recently completed a master of arts degree are unemployed, according to government statistics. Data from January

show an unemployment rate of 30 per cent for people within their first year after graduation. However, this drops to 3.5 per cent for people who completed their degrees more than a year ago.

Universities to help small businesses

Researchers in Swedish and Danish universities will work with 15 small and medium-sized companies to develop their business ideas through the Creating Competitive Jobs project. The companies will work at two Swedish and three Danish universities for six months, developing business ideas to generate job opportunities. The chosen companies will cover topics such as water treatment using algae, LED lighting and food protection.

PhD initiative takes shape

More than 200 institutions in Norway have indicated that they would like to take part in a doctoral education programme to be launched by the national research council Forskningsrådet. The initiative will fund PhDs for employees of public organisations, in subjects such as research and innovation policy.

usa

Parties clash over plans for COMPETES Act

Republican and Democrat members of the House of Representatives' Committee on Science, Space and Technology have introduced two very different bills to reauthorise the America COMPETES Act.

The act was first introduced in 2007, with the aim of doubling the budgets of physical-science agencies including the National Science Foundation and the National Institute of Standards and Technology.

On 6 March, Democrats on the committee, led by Representative Eddie Bernice Johnson from Texas, introduced legislation that would authorise annual budget increases of 5 per cent a year for the agencies. Just a few days later, Republicans, led by the committee's chairman Lamar Smith from Texas, introduced their version of the legislation, which would increase NSF and NIST budgets by 1.5 per cent each in fiscal year 2015.

The budget numbers in these bills represent authorisations for the agencies in question, not actual appropriations.

Johnson immediately criticised the funding levels proposed by the Republicans, saying that their bill "stops much too short of renewing our commitment to maintaining our scientific and technological leadership now and into the future".

Academic research groups are not enthusiastic about the Republican legislation either. The Association of American Universities, which represents research universities, said the bill "fails to meet the guiding principles" for reauthorisation of the COMPETES Act that by Rebecca Trager

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were endorsed last year by businesses, scientists and higher education representatives.

The Republican legislation, entitled the Frontiers in Innovation, Research, Science and Technology (FIRST) Act, also includes two contentious passages, one of which would require "greater accountability" for the research grants funded by the NSF.

The legislation would require the agency to demonstrate that the grants and cooperative agreements it wants to support are "worthy of federal funding". This would entail written justification that every grant serves the national interest by, for example, strengthening the economy, advancing health and welfare or supporting national defence.

"Unfortunately, the NSF has misused taxpayer dollars and funded too many questionable research grants—money that could have gone to higher priorities," Smith said. For example, he questioned how the federal government could justify spending \$220,000 to study animal photographs in *National Geographic*, or \$50,000 to study lawsuits in Peru from 1600 to 1700.

The FIRST Act has also been criticised for not giving the public quick enough access to the results of federally funded research. It says that scientific articles must be made available three years after initial publication, which is two years longer than is allowed by the National Institutes of Health.

usa in brief

Call for race balance in trials

Former surgeon-general David Satcher has called for more to be done to enrol African Americans

in clinical trials, especially for diseases to which they are particularly susceptible. "Without higher levels of participation among African Americans, we will never unlock the root causes of the disparate impact of a disease such as Alzheimer's," Satcher wrote in *The Washington Post*.

Sullivan takes the helm at NOAA

The Senate has confirmed that former astronaut Kathryn Sullivan will be the next administrator of the \$4.7-billion National Oceanic and Atmospheric Administration. Sullivan, whose appointment was announced on 6 March, became the first American woman to walk in space during her 15-year career at NASA. She has served as both acting and deputy NOAA administrator, and as the agency's chief scientist.

Seniors' genetic data made public

The National Institutes of Health will provide researchers with access to genetic data linked to medical informa-

tion on more than 78,000 people with an average age of 63, the agency has announced. The data will come from the Genetic Epidemiology Research on Aging genomics project and be available through the NIH's Database of Genotypes and Phenotypes.

Sequestration affected grants, GAO confirms

The congressional Government Accountability Office has confirmed that funding agencies awarded fewer or smaller grants in fiscal year 2013 as a result of the automatic sequestration cuts that went into effect in March last year. Scientists conducting research with federal grant money have said that managing their projects is difficult when future funding is so uncertain, the office said.

'Bad actor' to blame in fraud case

The Massachusetts Office of the Inspector General has concluded that one worker was "the sole bad actor" in a 2012 fraud case that resulted in the closure of the state's Hinton forensics lab. But in a report released on 4 March, the office said the "management failures" of the lab's directors contributed to Annie Dookhan's ability to carry out criminal acts, for which she is now in prison.

world

EU-Africa collaboration fund to end after first call, despite plaudits

The first round of successful applications to ERAfrica, a €10-million EU-Africa research fund, is to be its last, according to the project's leaders.

The programme has been praised for including African governmental funding, and was widely expected to continue as an innovative multilateral research fund. But project manager Johan Viljoen says there are no plans in place to renew the initiative.

"ERAfrica was always conceived as a three-year project with a single call. Projects of this kind are sometimes renewed, but this is by no means guaranteed," he says.

The programme uses EU money to coordinate a joint fund supported by African and European national funders. It is bankrolled by the supporting countries, originally Egypt, Kenya, South Africa and nine European nations. Burkina Faso, Ivory Coast and two more European nations have since joined, bringing the number of participants to 16. African countries contributed nearly €2.8m to the total funding.

world in brief

Russia's science academy plans to regain influence

The Russian Academy of Sciences has produced a draft charter in

an attempt to define its future role. The charter would make the presidents of the academies of medical and agricultural sciences—which were merged with the RAS as part of last year's controversial reforms—vice-presidents of the institution. It would also entitle the academy to some say in how its 436 institutes, which are now managed by the Federal Agency for Scientific Organisations, are run.

California and Israel to collaborate

The governor of California and Israel's prime minister have agreed to encourage collaboration between their universities and public and private research institutions. Governor Jerry Brown said the agreement would boost economic, cultural and academic cooperation between California and Israel, with an emphasis on water conservation, alternative energy, cybersecurity, health and biotechnology, education and agricultural technology.

Researchers push for access to medical records

Israel's Weizmann Institute of Science is negotiating a partnership that would allow its scientists to access data from medical records. The institute released a statement on 10 March to say that the possibility was being discussed with Clalit Health Services, a medical aid society that stores medical data. Zvi Livneh, dean of the biochemistry faculty at the Weizmann institute, said the

by Munyaradzi Makoni

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Funding for 17 projects was announced in February. They include research into biotechnology in Africa, climate change, cardiovascular disease and infant mortality.

Kenya is participating in the most projects, 12, closely followed by South Africa, which is part of 11 projects. Burkina Faso is participating in seven projects, Ivory Coast in five, Egypt in three and Ethiopia in one.

Viljoen described ERAfrica as a great success: "In no way is the decision not to renew the programme related to the project itself or its performance, which has clearly been excellent."

Meanwhile, the European Commission has launched a call for a project called Europe as a Global Actor, which includes collaboration with Africa. This will have a budget of €8.3m and will not be a direct continuation of ERAfrica, but can be seen as building on the basis for cooperation created by the project, Viljoen says.

data would help scientists to develop drugs and diagnostic tools for diseases such as cancer and diabetes.

Africa's post-2015 agenda prioritises science

Science, technology and innovation form one of six pillars in the common African position on a post-2015 development agenda. An African Union committee met in Chad last month to agree on the position, and a paper outlining the details is being finalised. The post-2015 agenda is an international negotiation over priorities for development assistance to follow on from the Millennium Development Goals.

GM trials allowed in India

India is to allow field trials of genetically modified crops despite considerable opposition. Sharad Pawar, the agriculture minister, told delegates at the National Conference on Agriculture for Kharif Campaign that GM crops would be tested to help meet a growing demand for food. In 2005, four activists filed a successful petition to the Supreme Court requesting that GM crops be banned.

Cooperative centres slam funding system

Tony Peacock, chief executive of Australia's Cooperative Research Centres Association, has called for an overhaul of federal research funding. The federal Research Block Grants system rewards research published in high-impact academic journals rather than work that benefits "the lives, wealth and environment of Australians", he said. The system provides funding based on metrics including number and impact of research publications.

FROM PERKS TO PAINS Staff at the Innovative Medicines Initiative headquarters in Brussels were disappointed this month to learn that plans for a new office layout, including some nice furniture, have been put on ice. Eyebrows have previously been raised at IMI's impressive quarters next door to the Palais de Justice, one of Brussels' top addresses, and in December the EU Court of Auditors expressed concern at IMI's administrative costs, which were €4 million (on top of salaries) in 2013. Whether the cancellation sprang directly from the auditors' report we do not know: but €4m does seem a lot to supply 30-odd staff with potted plants and biscuits.

DIGITAL CHALLENGES In a hi-tech world it makes sense for the European Commission to encourage businesses to step up their use of digital technologies. But perhaps it would be wise to make sure that digital competence begins at home. The web page for the Commission's Strategic Policy Forum on Digital Entrepreneurship, launched last month, is meant to display a large image down the middle, but instead a big empty box has been glaring back at visitors for more than a week now...

EYE SPY ONE The NSA/GCHQ eavesdropping scandal is being wilfully ignored by politicians and most of the press here in London, but its reverberations continue to be strongly felt elsewhere. One politician in Brussels,

contacted by *Research Europe* for an interview, noticed that we use Gmail as our email host and insisted on arranging all subsequent communication by telephone. "I don't trust British-American mail servers; the Queen's goons are reading everything," he explained.

EYE SPY TWO Exhibits surrounding the coffee breaks at the Innovation Convention in Brussels last week made for some interesting networking experiences—especially at the Google Glass stall, where attendees could try out the fashionable invention. Although Google staff were keen to point out how unobtrusive the glasses are, the number of times that you had to say the word "Google" to operate them seemed less than subtle. And they can't seem to cope with variety in diction, struggling to comprehend even the word 'Google' when spoken in a German or Italian accent.

BEARING WARM GIFTS Norwegian high-school classes visit Cern, the particle physics facility near Geneva, every year. This time, teachers brought along home-knitted "luse-kofte", sweaters from the 19th century, as gifts. To the delight of staff members, each sweater sported themes central to particle physics, including Cern's logo and the Brout-Englert-Higgs mechanism. "It is truly a lovely gift: everybody who has seen it has exclaimed how nice it is," said the theorist John Ellis. "And how well it suits me."



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