

MEDIA

Resistant to fake news

Finland counters false reports



After the end of the Second World War, the Soviet Union tried to use propaganda in the form of disinformation and false reports to sow uncertainty among the Finnish population. As a result, the Finnish government designated “media and information competence” a central “citizen competence” as early as the 1960s. Long before the current discussion of fake news, the Finnish Minister of Culture wrote in 2013 that “We all need media competence

in our various roles in the information society: as citizens, consumers, employees, and students.” The *Woodrow Wilson International Center for Scholars* (WWIC) views modern media consumers as “civilians in a news war zone” in which facts and verified reports are locked in a struggle with counterfeit news items. The WWIC’s new studies assesses what other countries can

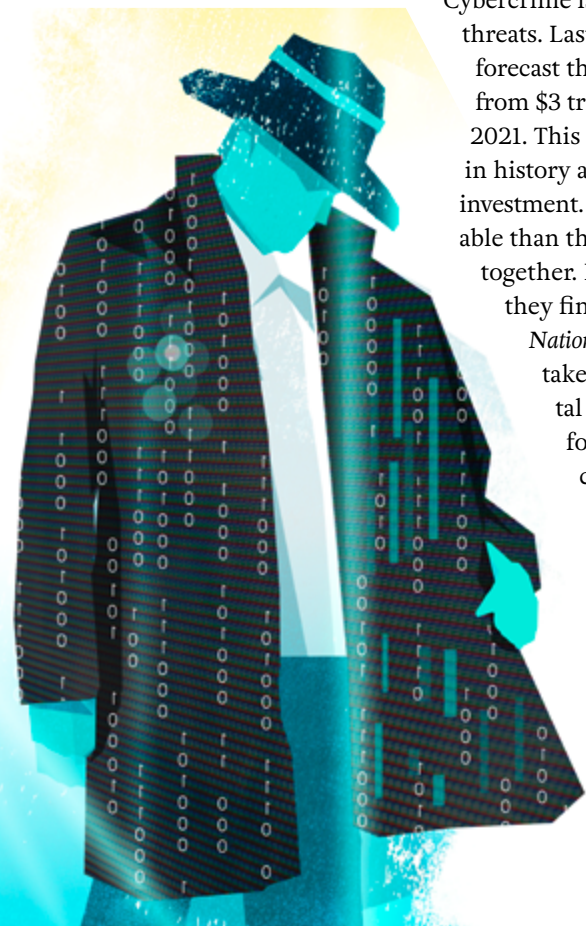
learn from Finland in the area of resisting fake news. [Woodrow Wilson International Center for Scholars](#), Washington D.C., USA

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CYBERSECURITY

Data black market

The most profitable market in the world is the Darknet



Cybercrime is one of the biggest global economic threats. Last year, the *Cybersecurity Magazin* forecast that the cost of cybercrime would rise from \$3 trillion in 2015 to an annual \$6 trillion by 2021. This represents the greatest transfer of assets in history and poses global risks to innovation and investment. It means that cybercrime is more profitable than the global trade of all illegal drugs put together. But these deals need a market – and they find it primarily in the Darknet. The *Rand National Security Research Division* has undertaken a painstaking study of the fundamental characteristics of these black markets for data. The experts agree that, in the coming years, the quality of cyberattacks will exceed our capabilities to defend ourselves. What they do not agree about is whether businesses or private individuals will be more severely affected and what protective measures it is best to take. Their conclusion is that things will get unpleasant. *Rand National Security Research Division*, Santa Monica, USA


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INDUSTRY 4.0

The internet of unsecured things

Why protecting IoT devices requires international standards

The *Australian Strategic Policy Institute* has calculated that at the end of 2017, 8.4 billion devices were connected to the internet. By 2020, that number will have risen to more than 20 billion. The Internet of Things (IoT) offers many advantages for all industries, but the connectivity of devices that used to be isolated also leads to great weaknesses and potential dangers. The constantly rising number of interconnected devices with insufficient protection offer exponentially increasing opportunities for attack. What is missing is an international standard for protecting or encrypting these devices. Various international organisations do cover individual areas, but there is insufficient coordination and no overarching vision. The *Australian Strategic Policy Institute's* new strategy paper shows how this situation can be remedied. *Australian Strategic Policy Institute*, Canberra, Australia


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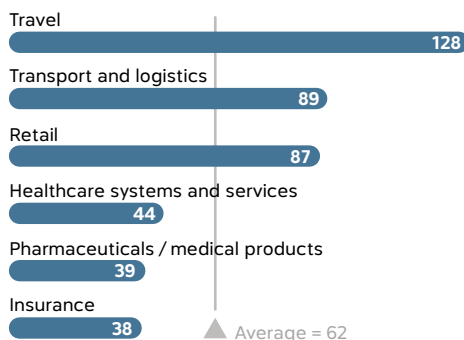
ARTIFICIAL INTELLIGENCE

Not a panacea

Only those who master the new algorithm can make profits

Artificial intelligence (AI) is the transformative technology of the 21st century. Its practical application throughout the economy rises each year. New deep learning techniques are being used successfully in increasingly complex applications. But AI is not a panacea: Its economic added value is much less than is generally assumed. That is why, in

Potential incremental value from AI over other analytics techniques (in percent)



Source: McKinsey Global Institute (2018)

addition to the great potential of AI and deep learning technologies, the associated

limitations and obstacles must also be considered. The value of AI is ultimately not in the models themselves, but in the ability of companies to use them. The *McKinsey Global Institute's* new discussion paper considers which industrial partners might assume a pioneering role in this area in the coming years. *McKinsey Global Institute*, San Francisco, USA


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GOVERNANCE

Disruptive democracy

Additional government services need not automatically mean additional costs

How can states, governments, and political organisations become more effective so as to provide their citizens better services? This question is not a new one. *Deloitte Insights* believes that the public sector must behave more like a private company in order to achieve better products and services for the same or lower prices. But additional and improved public services need not automatically cost more. Health, mobility, education, and penal policy are specifically addressed. Disruptive innovations are already allowing paradigm shifts – improved public services for a lower price. The new study from Washington shows specifically how it can work. *Deloitte Insights*, Washington D.C., USA

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ENERGY

Sustainable neighbourhood

The energy revolution makes its best progress at the municipal level

All over the world, local administrations and other local supporters are leading the way in the area of sustainable environmental policy: They are the first to implement new climate protection regulations supporting international agreements. Many municipalities have already set themselves the goal of using 100 percent renewable energies and reaching zero emissions. The biggest difficulties for developing comparatively effective policy is still at the level of nation states, however. For instance, current initiatives in many countries fail to meet the obligations of the Paris Agreement. *Beyond Zero Emissions* in Melbourne believes that attention should therefore be returned to the local level. What works at the small scale can often be expanded or scaled up. *Beyond Zero Emissions*, Melbourne, Australia

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AFRICA

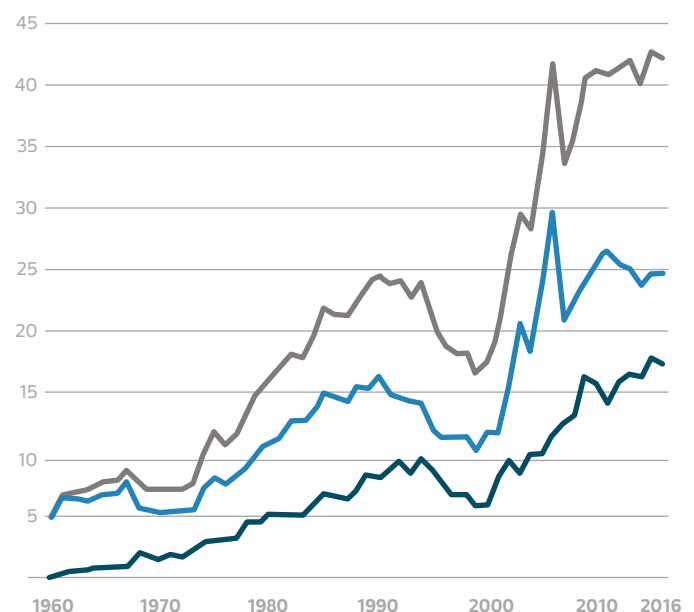
Transfer payments to the homeland

What diaspora bonds are all about

The cost for achieving the United Nations Sustainable Development Goals (SDGs) in Africa continues to increase. This is associated with the search for innovative sources of finance to cover existing expenses and close gaps in financing that have recently opened. At the same time, Africa's diaspora populations are growing, as are their savings and the scope of their available resources. Until recently, African countries largely ignored these potential investors. The Centre for International Governance Innovation thinks that this is about to change. In order to create a coordinated approach, the African Development Bank would need to issue targeted "diaspora bonds" that would allow people outside of Africa to invest directly in the financing of infrastructure and development projects in their home countries. A new study shows how this could be done. *Centre for International Governance Innovation*, Waterloo, Canada

Aid flows to sub-Saharan Africa 1960–2016

Net disbursements (billion US dollars, 2015 prices)



Source: Brookings, The end of aid (2018)

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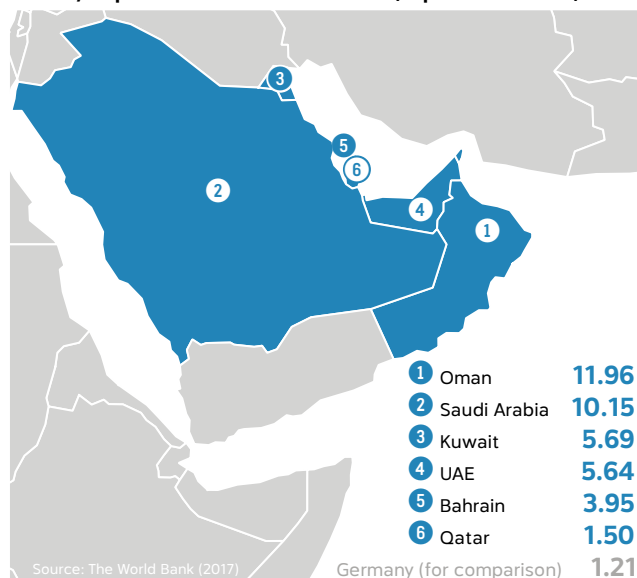
MIDDLE EAST

The armed Arabian Peninsula

The arms race among Arab nations

The armed forces of the Gulf monarchies on the Arabian Peninsula have traditionally played a subordinate role. The monarchies' security and stability has been derived from international relations and, in emergencies, at least one external military power has been available in the background. *The French Institute of International Relations* believes that this has changed in the last few years, however: Saudi Arabia and the United Arab Emirates are deploying their own forces in an unprecedented manner; Qatar has doubled its defence expenditures in the middle of the current Gulf crisis; and Oman, Bahrain, and Kuwait are also investing much more in military equipment. This increasingly makes the Arabian Peninsula the centre of the international arms race. The French Institute of International Relations shows where it all might lead. *French Institute of International Relations*, Paris, France

Military expenditure in the Arab world (in percent of GDP)



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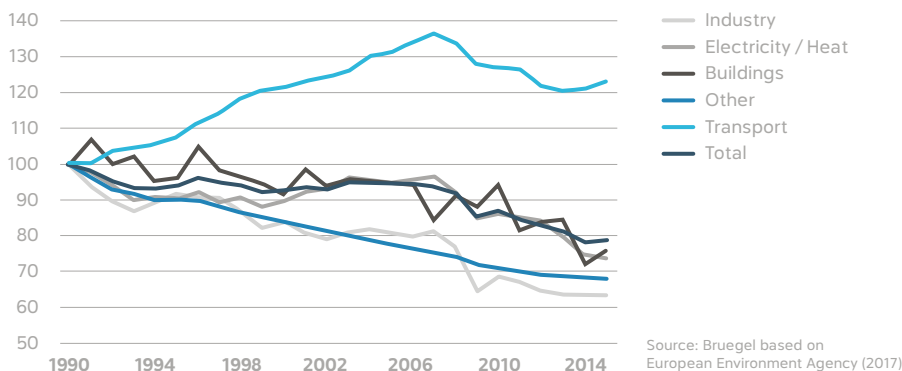
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ENVIRONMENTAL POLICY

Going the wrong way

The EU transport sector is emitting increasing quantities of CO₂

As part of the Paris Agreement, the European Union committed to reducing its greenhouse gas emissions by 40 percent from their 1990 levels by 2030. Between 1990 and 2015, the emissions did fall dramatically (20 percent) in all sectors – except for transport. This makes the transport sector a primary obstacle in decarbonising the EU. Reducing the CO₂ emissions in this sector requires new, effective approaches. Road traffic, which is responsible for more than 70 percent of all transport-related emissions, is the top priority. Improvements here would not only improve the quality of city air, but be an important step for the overall health of EU citizens. *Bruegel* in Brussels has prepared a new strategy paper on the subject. *Bruegel*, Brussels, Belgium

Transport: The only sector in which Europe's CO₂ emissions are on the rise

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ENVIRONMENT

Unstoppable

Climate change will change our lives

Climate change can no longer be stopped. Current and future generations must therefore adapt to new climatic conditions. That is why “resilience” has become a buzzword. But the *Lee Kuan Yew School of Public Policy* believes that the connotations of resilience are not only positive. Extreme weather events will change our lives dramatically in future. “Resilience” therefore also means adapting our everyday lives and recognising new realities. The new study from Singapore shows what it all means for policy design and how it can be practically implemented. *Lee Kuan Yew School of Public Policy*, Singapore

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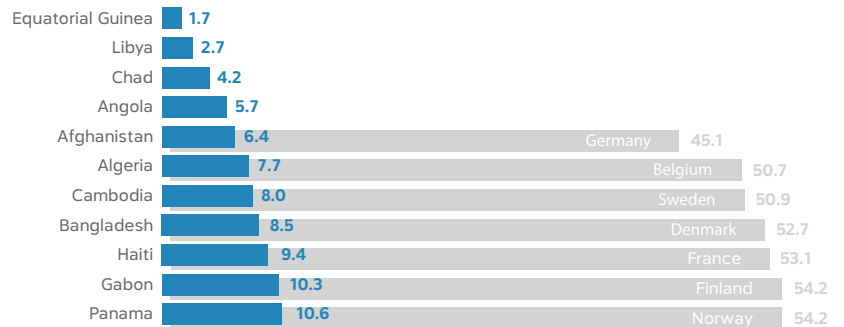
PUBLIC FINANCE

Controlling taxes

How developing countries can make progress in tax legislation

Countries need their own funds to pursue sovereign tasks. Tax legislation is therefore a central prerequisite and an important key for a country to accelerate or slow its own growth. A new study by the *Chr. Michelsen Institute* (CMI) compiles and analyses tax legislation best practices at the international level to support developing countries in constructing a stable financial framework by mobilising domestic revenue and in deploying international funds more effectively. The new study from Bergen includes this list and shows how developing countries can profit from the practices. *Chr. Michelsen Institute*, Bergen, Norway

Tax revenue proportionately to GDP (in percent)



Sources: ■ The Heritage Foundation (2015) ■ OECD, Government at a Glance 2017 (2017)

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ELECTIONS

Interference failed

Fifteen lessons from the elections in France

Shortly before the 2017 presidential election in France, Emmanuel Macron's campaign team was the target of a cyber-attack. Massive disinformation actions after the beginning of his campaign were aimed at influencing the election in favour of Marine Le Pen. But the Russian intervention did not work in France.

The *Center for Strategic and International Studies* (CSIS) in Washington D.C., USA explains what lessons can be learned from this incident.

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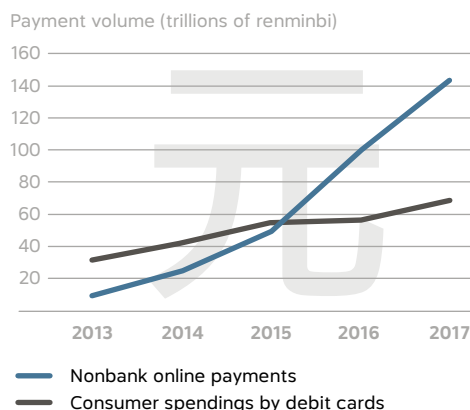
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GLOBAL ECONOMY

No wallet, no problem

China is the world's largest FinTech innovation driver

Chinese nonbank online payments outreach consumer spendings by debit card



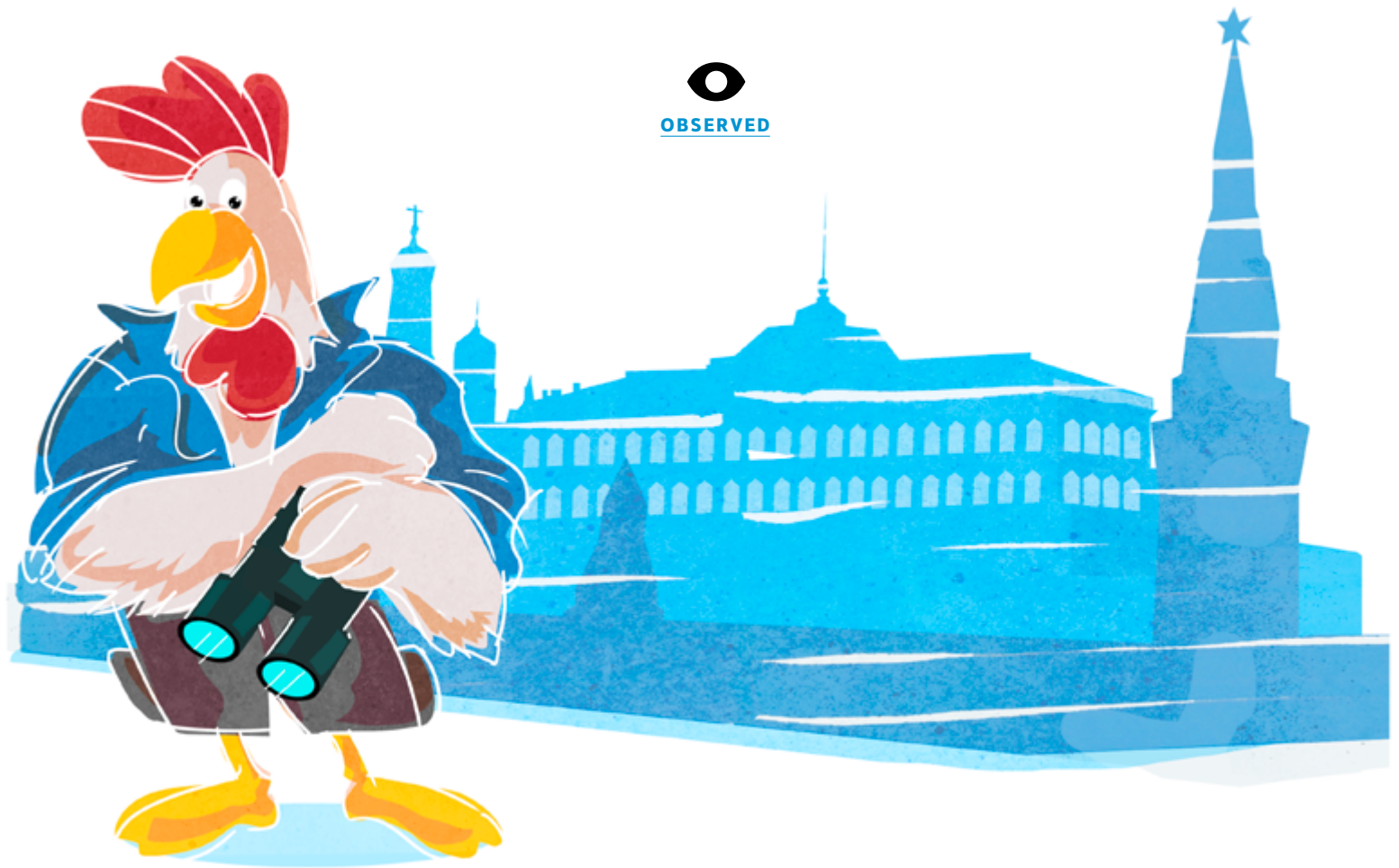
Source: People's Bank of China (2017)

A survey in China over the past year showed that 84 percent of Chinese people do not worry about leaving the house without cash – not because they rely on credit cards or checks, but because all business partners accept payment methods such as Alipay and WeChat. This means that China has passed the United States in cashless payment. The U.S. assumed the pioneering role in checks and credit cards in the last century, but China is riding the

FinTech wave of the future. The *Peterson Institute for International Economics* (PIIE) believes that China's 2004 law governing electronic signatures is a key factor in the growth of online payments, as is systematic government support for "advances in the online payment system" since 2005. The PIIE's discussion shows what we can learn from these developments. *Peterson Institute for International Economics*, Washington D.C., USA

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SOCIAL ENTREPRENEURSHIP

Independent negotiation

What you can do for your country

Alexandre Pesey, founder of *Le Coquetier*, wants to change France. He thinks that too many French people believe that the role of the government is to guarantee its people a carefree life. Instead, France needs more entrepreneurs – not just in the technology sector, but in the social and societal areas as well. The goal must be to advance the country and not just wait for benefits from the state. To this end, Pesey has founded a new social movement. *Le Coquetier* shows how that movement is developing and what consequences it might have for Germany.

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ENVIRONMENTAL PROTECTION

The climate doesn't stop at national borders

Why there should be globally uniform climate legislation

All the countries in the world – except for the U.S. – signed the Paris Agreement. Of them, 163 have already ratified climate protection plans that implement the Agreement. In 139, environmental framework legislation has been created as a fundamental legal basis. But both the content and the legal capabilities of this legislation vary widely, resulting in long delays in the implementation of the Paris Agreement. The *Sabin Center for Climate Change Law* and the *Grantham Research Institute on Climate Change* and the Environment are therefore calling for a uniform approach. It is not just climate change that require an international approach, but also the relevant legislation. There is already an initial draft.

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FIGHT AGAINST FAKE NEWS

Kremlin under surveillance

What the West can do about Russian propaganda

Russia uses propaganda successfully against the West. Systematic disinformation campaigns and the spreading of conspiracy theories are aimed and destabilising and dividing Western democracies. If the West is to resist the hybrid threat, it must detect and confront instruments of influence and disinformation. This is just what the *European Values Think-Tank* in Prague deals with in its Kremlin Watch project. The Kremlin Watch team monitor and expose misinformation, follow trends, and perform fact-checking.

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FACES



HEALTH

Eyes open

There are too few eye specialists, especially in developing countries. Those who want an eye specialist appointment must wait weeks or months. This waiting period often results in irreparable damage up to and including loss of eyesight. Vanessa Gurie and *I-Ophthalmology* want to change that and save the eyesight of up to 200,000 people every year. Her smart eye care app can detect the severity of eye disease almost in real time. In less than two minutes, an initial analysis is validated by a team of online eye specialists and individual solutions prepared. This allows patients to be sent directly to the hospital for an operation or given a personalised therapy recommendation. *I-Ophthalmology* could thus be an important component of reducing avoidable eye disease worldwide.

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BIOTECH

Sewage helps fight antibiotic resistance

The WHO estimates that, starting in 2050, antibiotic resistance will cost the lives of ten million people each year. Jérôme Lutz and Rüdiger Trojok from Munich have highlighted a promising potential solution. In future, they hope to use so-called bacteriophages collected from industrial sewage and specialised for bacteria and archaea as cell hosts instead of antibiotics. Bacteriophages are much more specific than antibiotics and have no known side effects. However, the phage mixture must be created individually for each patient and his symptoms. This challenge has so far prevented this type of therapy. To solve this problem, the two researchers have developed a phage library for clinics and medical centres in which a relevant mixing procedure allows individual phage cocktails to be produced within a very short time. In a few years, this might result in an entirely new form of therapy.

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MEDICINE

Science meets medicine

Isabell Schellinger has developed a method for minimally invasive treatment of aneurysms while they are still small, before they have grown to life-threatening size. The achievement has won the former Konrad-Adenauer-Stiftung scholarship winner and member of the KAS founder network a place in this year's European Forbes ranking of the most important people under 30. Schellinger and her company, *Angiolutions*, develop treatment instruments for vascular diseases that are already capable of saving many lives. The work of the *Angiolutions* team combines current biomechanical, biological, and molecular research with traditional engineering skill to create new tools for the many challenges in vascular medicine.

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