



PLANETARY HEALTH WEEKLY

BRINGING YOU CURRENT NEWS ON GLOBAL HEALTH & ECOLOGICAL WELLNESS

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IRAQ'S TOXIC CONFLICT

Amongst all of the death and destruction in Iraq, there is an often-overlooked victim whose harm has far reaching consequences: The environment. Whilst Iraq's environment has suffered from degradation due to conflict for decades, in recent years it has been exacerbated due to the so-called Islamic State (ISIS). Aside from oil pollution, the PAX report also highlights the human health risks from what it called 'urban damage'. That is, the dangerous amounts of toxic chemicals realized from damaged industrial sites and abandoned weapons facilities. There has been extensive PCB (Polychlorinated biphenyl) contamination in Mosul, due to damage to the city's electricity network. [Read More on IPS News](#)



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THE LIFE AND DEATH FIGHT AGAINST ASBESTOS ON THE JOB

In May of 1971, strike action by construction workers once again made the front pages of the province's newspapers — but this time the issue was the life and death of construction workers on the job. Construction is one of the deadliest industries in the country, killing and injuring workers at a higher rate than all other industries but forestry. One of the most important challenges taken up by the unions and the BC and Yukon Territory Building and Construction Trades Council would be the job of keeping workers alive.

[Read More on The Tyee](#)





ESMOND BRADLEY MARTIN: IVORY INVESTIGATOR KILLED IN KENYA

Esmond Bradley Martin, 75, was found in his Nairobi home on Sunday with a stab wound to his neck. The former UN special envoy for rhino conservation was known for his undercover work investigating the black market. The US citizen had recently returned from a research trip to Myanmar. Bradley Martin was in the process of writing up his findings when he died, reports the BBC's Alastair Leithead from Nairobi. His wife found him in their house in Langata. Police are investigating the circumstances but suspect it was a botched robbery. Our correspondent says Bradley Martin had spent decades risking his life to secretly photograph and document illegal sales of ivory and rhino horn, travelling to China, Vietnam, and Laos to pose as a buyer and establish the details of black market prices.

[Read More on BBC](#)

CHINA TO MAKE MORE POLLUTED LAND SAFE FOR AGRICULTURE BY 2020

China will try to make around 90 percent of its contaminated farmland safe for crops by the end of 2020, and will also restrict development on a quarter of the country's territory, environment minister Li Ganjie said. Li said China would conduct a detailed investigation into soil pollution and launch pilot zones that would be used to test soil pollution prevention and treatment technologies, according to an account of a meeting published by the Ministry of Environmental Protection on its official website (www.mep.gov.cn). A 2013 survey showed about 3.33 million hectares (8 million acres) of China's farmland - an area the size of Belgium - was deemed too polluted to grow crops, with estimated clean-up costs amounting to 1 trillion yuan (\$159 billion). China declared war on pollution in 2014, trying to head off public discontent and reverse the damage done to its skies, rivers and soil by more than three decades of breakneck growth.

[Read More on Reuters](#)



ON THIN ICE

Nepal may be too occupied with its heated politics to take note of its frozen resources in the Himalayan glaciers. But if a recent scientific finding in the Everest region is any indication, the ultra-frigid zone could play a huge role in the politics not just of the country, but of the entire region in the future. The study on the Khumbu glacier has found that hundreds of icy ponds on Himalayan glaciers could hold the key for the region's future water security. It says the icy ponds on debris-covered glaciers have been found to retain and release waters, regulating flow to downstream rivers that serve as lifelines to millions of people. Scientists involved in the study say these ponds could become more void and porous to hold more water in the future.

[Read More on The Kathmandu Post](#)



WHY YOU SHOULD BE FREAKING OUT THAT THE US CDC IS MASSIVELY CUTTING OVERSEES OPERATIONS

About two weeks ago, an internal memo leaked from the US Centers for Disease Control and Prevention (CDC). It informed personnel that the center was anticipating a loss of approximately 80% of its funding for international outbreak prevention work. Then the Washington Post reported in more detail that starting in September 2019, the CDC will narrow its focus and eliminate many of its foreign country programs. This move would have a profoundly detrimental effect on the ability of the American government to stop outbreaks like ebola before they come to the United States. In 2013, CDC received about \$600 million in the form of five years of supplemental funding from Congress. [Read More on UN Dispatch](#)

GLOBAL WARMING & HUNGER

For more than a decade, annual data showed global hunger to be on the decline. But that has changed: According to the latest data from the Food and Agriculture Organization of the United Nations (FAO) hunger affected 815 million people in 2016, 38 million more than 2015, and malnutrition is threatening millions. Research from Bjorn Lomborg's think tank, Copenhagen Consensus, has long helped to focus attention and resources on the most effective responses to malnutrition, both globally and in countries like Haiti and Bangladesh. Unfortunately, there are worrying signs that the global response may be headed in the wrong direction. The FAO blames the rise in hunger on a proliferation of violent conflicts and "climate-related shocks," which means specific, extreme events like floods and droughts. But in the FAO's press release, "climate-related shocks" becomes "climate change."

[Read More on My Republica](#)



CELLPHONE RADIATION STUDY FINDS MIXED EFFECTS IN RODENTS, WITHOUT CLEAR IMPLICATIONS FOR HUMAN HEALTH

The long-awaited results of a \$25 million National Institutes of Health study on the effects of cellphone radio-frequency radiation exposure on animals is out, and the results are mixed. They showed a higher risk of tumors, DNA or tissue damage, and lower body weight in some groups of rodents, but no obvious ill effect in others and no clear implications for human health. John Bucher, a senior scientist involved in the 10-year study, was cautious in his interpretation of the results with journalists Friday. Given the inconsistent pattern of the findings, the fact that the subjects were rats and mice rather than people and the high level of radiation used, he said, he could not extrapolate from the data the potential health effects on humans.

[Read More on Washington Post](#)



A TRIP TO A NEW MUSEUM FOR CONVINCING AMERICANS ABOUT CLIMATE CHANGE

A new exhibition is the inaugural show of the country's climate museum in New York City. Housed at the Parsons School of Design, the museum—for now—only consists of the gallery on the corner of 13th Street and Fifth Avenue. After garnering a lot of attention when its founding director Miranda Massie announced the museum's incorporation in 2015, its first public offering has opened with little fanfare. This is in part because Massie is testing the potential audience for the museum, but also because she's experimenting with the delicate balance of its content. When she was introduced to Weil through a friend and saw images of 88 Cores, she thought it would not only complement the airy confines of the Parsons gallery, but would also, more importantly, affect people emotionally. [Read More on The Atlantic](#)

FLOODS ARE GETTING WORSE AND 2500 CHEMICAL SITES LIE IN THE WATER'S PATH

Anchored in flood-prone areas in every American state are more than 2,500 sites that handle toxic chemicals, a New York Times analysis of federal floodplain and industrial data shows. About 1,400 are located in areas at highest risk of flooding. As flood danger grows — the consequence of a warming climate — the risk is that there will be more toxic spills like the one that struck Baytown, Tex., where Hurricane Harvey swamped a chemicals plant, releasing lye. Or like the ones at a Florida fertilizer plant that leaked phosphoric acid and an Ohio refinery that released benzene. Flooding nationwide is likely to worsen because of climate change, an exhaustive scientific report by the federal government warned last year. Heavy rainfall is increasing in intensity and frequency. [Read More on NY Times](#)



SPOTLIGHT ON INDIGENOUS HEALTH: NEW HUB CONNECTS ACADEMIA AND INDIGENOUS COMMUNITIES

The program represents a fundamental reorientation in how health research takes place in First Nations communities, said Western University's Geography professor Chantelle Richmond, who serves as the network's program leader. The new network will support research by Indigenous people for Indigenous people, with emphasis on the health and social issues that matter to them. It is intended to help communities identify and prioritize their health needs; to enable meaningful, measurable and relevant study; and to train the next generation of Indigenous health researchers.

[Read More on Western University](#)



QUOTE OF THE WEEK

“So why is this happening? Tax cuts for the rich, tax avoidance and evasion, financial deregulation, and the prioritization of returns to shareholders and owners by large companies have all helped the rich get richer while the poor and the middle classes are left behind. This adds to long-standing social inequalities – it is no coincidence that men are overrepresented at the top of the pyramid, and women are overrepresented in the world's lowest-paid and most precarious jobs.”

BRANKO MILANOVIC

ECONOMIST AND AUTHOR OF

Global Inequality: A New Approach for the Age of Globalization
(Belknap Press: An Imprint of Harvard University Press, 2016)

[**Read More on Globe and Mail**](#)

EVENTS TABLE

DATE	CONFERENCE	LOCATION	REGISTER
Feb 9-18	World Urban Forum 9	Kuala Lumpur Malaysia	http://wuf9.org/registration/?utm_source=World+Urban+Forum+9&utm_campaign=cadfb59aa8-EMAIL_CAMPAIGN_2017_12_13&utm_medium=email&utm_term=0_00134fbc8a-cadfb59aa8-1a4eff-EMAIL_CAMPAIGN_2017_12_13&utm_medium=email&utm_term=0_00134fbc8a-6e4b1a4eff-173728921
March 16-18	2018 CUGH Conference	New York USA	www.CUGH2018.org
April 20-22	BioVision Alexandria 2018	Alexandria Egypt	http://www.bibalex.org/bva2018/home/StaticPage.aspx?page=69
April 27-29	Pegasus Conference	Toronto Canada	https://eventdex.force.com/BLN_RegistrationDym?id=a192A00000BChD2QAL&mc_cid=c7ca6f6818&mc_eid=7a76cf866d

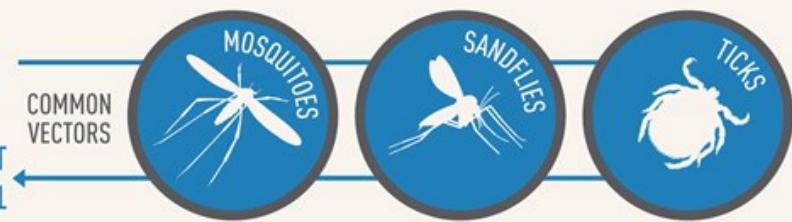


NEW REPORT: PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B

VECTOR-BORNE DISEASES

VECTORS MAY BE A THREAT TO YOU, AT HOME AND WHEN TRAVELLING

VECTORS ARE SMALL
ORGANISMS
THAT CARRY SERIOUS DISEASES



WITH JUST 1 BITE

- Malaria
- Dengue
- Leishmaniasis
- Lyme disease

they can transmit
diseases such as:

- Yellow fever
- Japanese encephalitis



Diseases spread by vectors **kill a million people** every year and
more than half of the world's population is at risk

While this issue is two years old it contains so much important information on the effects of climate change on infectious diseases. Among the 13 articles are:

- Climate, environmental and socio-economic change: weighing up the balance in vector-borne disease transmission
- Evolution in action: climate change, biodiversity dynamics and emerging infectious disease
- Evolution in action: climate change, biodiversity dynamics and emerging infectious disease
- Climate change influences on global distributions of dengue and chikungunya virus vectors
- The impact of climate change on the geographical distribution of two vectors of Chagas disease: implications for the force of infection
- Climate change impacts on West Nile virus transmission in a global context

[Read More on The Royal Society](#)

FRANKENSTEINIAN EXPERIMENTS

ORGANS THAT COULD HELP

Trials of pig tissue transplanted into humans to treat diabetes, Parkinson's disease and blindness are "imminent" but solid organ transplants - hearts, kidneys, livers - are still "several years away".

KEY ● Imminent ● Years away

Pancreatic islets to treat diabetes



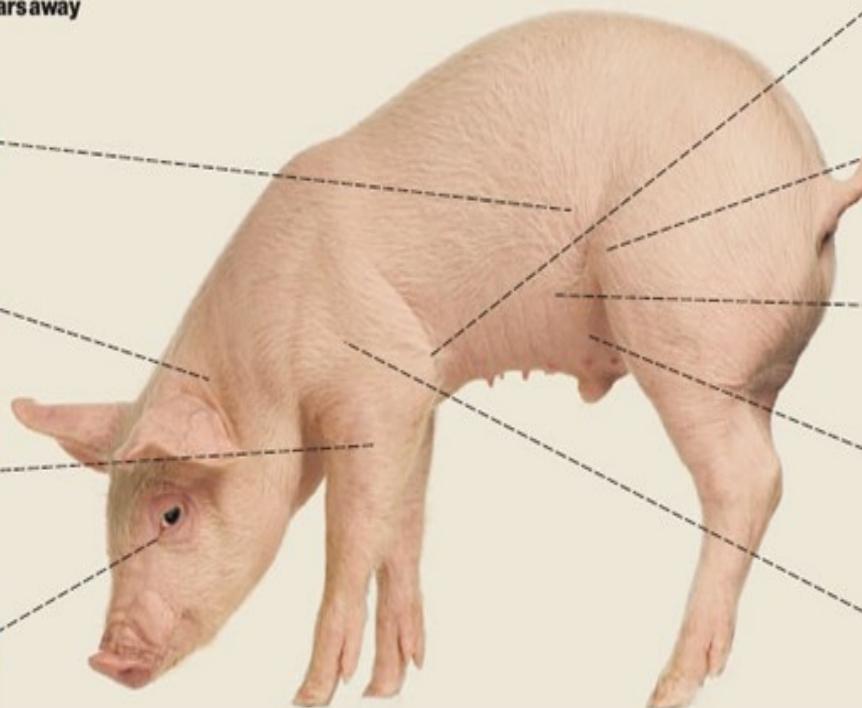
Brain cells to treat Parkinson's and Huntington's disease



Red blood cells for transfusion



Eye tissues corneas etc.



Heart



Kidney



Liver



Small bowel



Lungs

The increasing demand for organs, tissues and cells, and the dearth of available human organs, has focused scientific interest towards taking organs from animals. The term for the transplanting of organs from one species to another is called xenotransplantation and so far it has not worked at all. However entire corporations are at work, slicing and dicing animals so that one day humans can be part pig and part baboon.

The argument, in favour of animal to human organ transplantation, is that these organs would be available whenever required, instead of making patients wait for months. An immediate transplantation would perhaps result in improved chances of survival. Instead of waiting for a dead human, whose organs are already slightly damaged, the organs could be taken from healthy animals under anaesthesia.

The pig has become the animal of choice for most companies. Thousands of pigs are being killed to use in human bodies. But, before they get to humans, scientists first transplant pig organs into the bodies of baboons to see if they can work in a different species.

[Read More on The Kathmandu Post](#)



YOU'VE GOT YOUR DNA KIT: NOW WHAT CAN YOU DO WITH IT



Differences among people, such as eye colour or hair colour, come from slight variations in our genetic code. As technology advances, it's getting easier to unlock the secrets in our DNA to gain new insights into who we are and to apply that knowledge to dramatically change our lives and society.

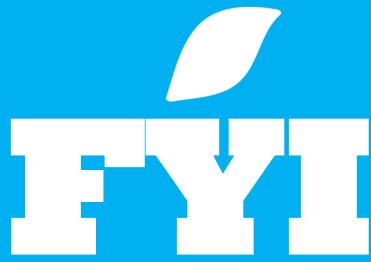
This has led many to get personal reports on their own genetic code in exchange for payment and saliva samples. Excitement over these reports recently jumped after Oprah Winfrey recommended the DNA test by 23andMe on her annual favourite things list.

But the applications of making DNA information more accessible stretch far beyond satisfying our curiosity about who we are and what our genes might say about us.

The availability of genetic data can potentially be tapped to treat medical conditions, leading to personalized health care and wellness regimens, with larger implications for personal, cultural, social and economic change. For example, companies such as Newtopia provide customers with weight-loss plans that are tailored to one's own DNA.

As researchers trained in economics, we study the impact of how genetic and environmental factors influence the development of human capital measures such as education and health. As we learn more about our DNA, the possibilities that arise for policy and the economy as a whole are as numerous as our individual genomes are varied.

[Read More on The Conversation](#)



URBAN AFRICA: AVOIDING THE PERFECT STORM



About 40 percent of the population in sub-Saharan Africa, or nearly 1 billion people, live in an urban area today. Over the next 25 years, that number is expected to double, raising unprecedented challenges for the region. The confluence of this rising urban population, relatively low income per capita, and a lack of infrastructure are serious causes for concern. As the region already confronts critical deficits in infrastructure and related funding, the looming crisis in the provision of urban infrastructure, especially transport, requires particular attention.

Projecting the level of infrastructure funding required for urban Africa is fraught with complexities. The continent requires an annual \$93 billion to fund infrastructure needs, a large share of which is for urban areas. In fact, a 2016 African Development Bank study states that “two-thirds of the investments in urban infrastructure to 2050 have yet to be made.”

The infrastructure gap is notably reflected in the inadequacy of transport infrastructure in African cities. Compared with access to electricity, water and sanitation, and telecommunications, defining a target for urban transport access is not clear-cut. Yet, it is evident that African cities are physically fragmented and dispersed with a lack of connective infrastructure. For instance, much of the area surrounding the central business districts of many of Africa’s largest cities are without paved roads (Figure 2.7). This poor infrastructure leaves people and firms disconnected, constraining their accessibility to economic opportunity. Such inefficiencies in the design of the city can make urban living costs burdensome and jeopardize the potential benefits of agglomeration.

[Read More on Brookings Education](#)



CREATE “SPONGE CITIES” TO TACKLE WORSENING FLOODS



With floods now causing more damage more frequently around the world, it is time to counter their effects by turning our towns into “Sponge Cities”, a recent trend popularised by China to absorb rainwater through permeable roads and pavements, parks, rooftop gardens and other green spaces. Floods causing huge loss of lives, homes and other property have increased significantly in many parts of the world. This is attributed to more intense rainfall resulting from climate change. But manmade factors, especially urbanisation and the chopping of forests and trees are also to blame.

Scenes of the havoc caused by flooding, such as swollen rivers bursting their banks, and roads, houses, prominent buildings and motorcars submerged in water can now be seen frequently around the world. Ordinary members of the public, who are the main victims, and policy makers alike, are now looking at the causes and searching for solutions to urban flash floods. In Penang, Malaysia, flash floods have been occurring recently with unprecedented frequency and intensity, with three major incidents in seven months last year. Recently I attended an interesting dialogue on the floods between civil society groups and local government officials. At the same time, I came across several articles on the concept of “Sponge City.” Most of them were on how China is turning 30 of its flood-prone urban areas into “sponge cities” in order to prevent floods and retain rain water. The Chinese plan big and fast. It launched the sponge city project only in 2015, but they target that 70% of rainwater will be retained in 80% of urban areas by 2020.

[**Read More on IPS News**](#)



5 TIPS FOR A SUCCESSFUL INTERNSHIP PROGRAM



Internships are almost a right of passage for anyone starting out their career in global development, and these experiences should be beneficial for all parties involved. For the employer, it is an opportunity to nurture emerging talent and gain new perspectives while benefiting from additional support for their teams and projects. For the intern, it is an opportunity to explore areas of interests, develop skills, gain exposure to different aspects of development work, and learn from professionals experienced in the sector.

An internship that is of real value to both the employer and the intern doesn't just happen, however. Here, staff from Landesa and PATH, having both recently hosted young professionals as part of the Hilton Prize Coalition Fellows program, share their tips for hosting an intern. Keep reading to find out their tips for success.

The intern's role should be clearly defined and ideally involve them working on a long-term project where they can see how this is contributing to the overall mission of the organization. Katharine Kreis, head of the nutrition innovation team at PATH says she is not interested in bringing people in to "file and organize," or in just finding things for them to do as they go. "This doesn't make for the best experience for the intern," she adds. Think about the new skills that a recent graduate or early-career professional could bring to your team, and plan for them to take ownership of meaningful and challenging projects that utilize these. Kreis says it is important to have a "very tight scope of work" and be clear how that person's skill set fits that scope.

[Read More on Devex](#)



**Stubborn By Nature
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@PlanetaryWeekly



@PlanetaryHealthWeekly



planetaryhealthweekly@gmail.com



Planetary Health Weekly

Publisher and Editor: **Dr. David Zakus**
dzakus@ryerson.ca

Production: **Abinethaa Paramasivam & Angeline Sahayanathan**



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