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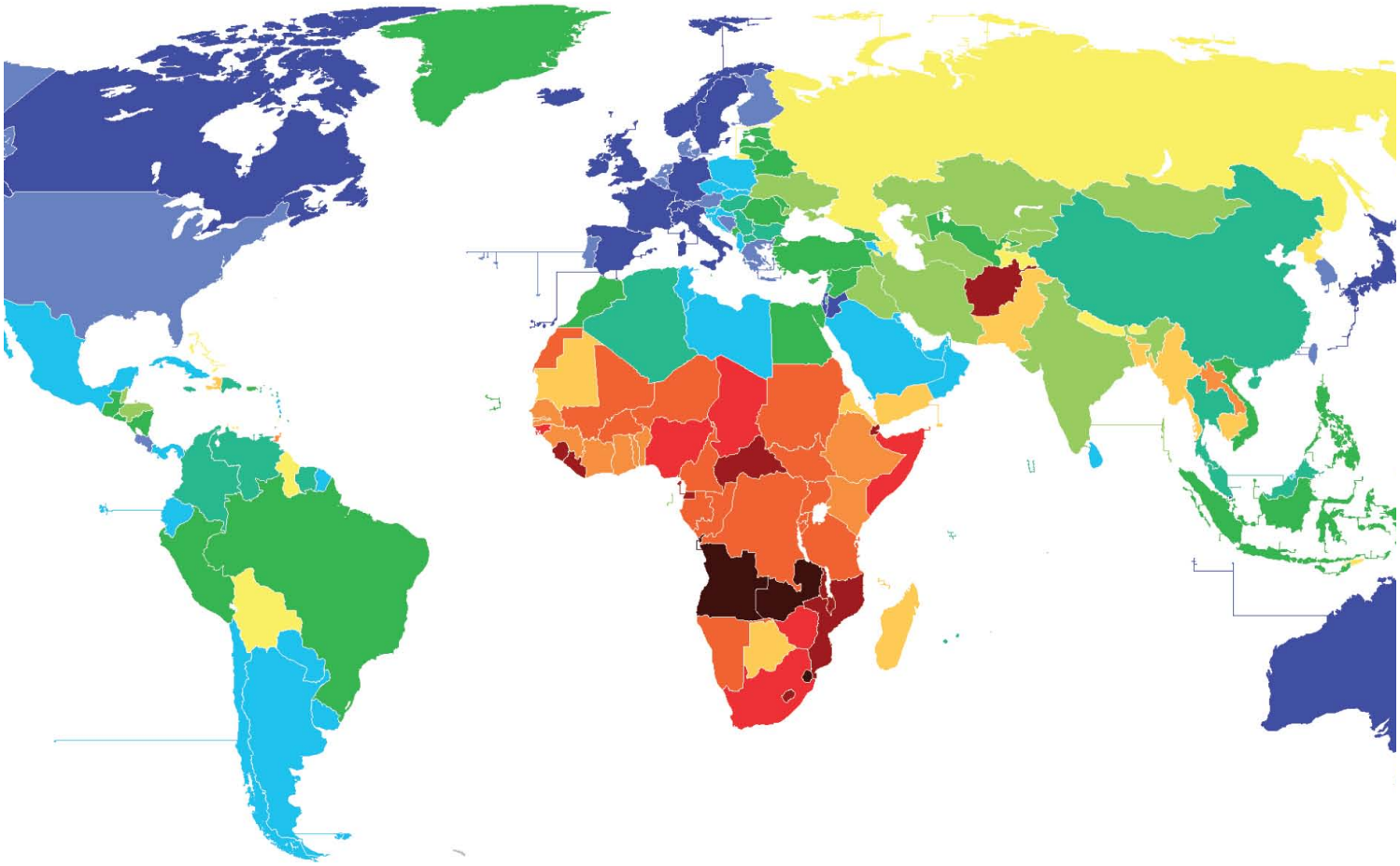

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For the first time, Fukushima recovery worker diagnosed with cancer

Indonesia fires can't be put out,Malaysian Minsiter warns

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Headlines

For the first time, Fukushima recovery worker diagnosed with cancer

TOKYO — When meltdowns struck Japan's Fukushima Daiichi nuclear power plant in the wake of a devastating tsunami in 2011, more than 44,000 workers were deployed to take the facility safely offline. The job was messy: Millions of gallons of radioactive water had to be stored on site as the plant's operator, Tokyo Electric Power Co., known as Tepco, faced a clean-up some priced at $100 billion.

And for the first time, one of the workers involved in that cleanup has been diagnosed with cancer related to his job, as Japan's NHK reported.

Japan's ministry of health, labor and welfare announced Tuesday that a recovery worker — a man unnamed in news reports — has been diagnosed with leukemia. The ministry confirmed the man's cancer was related to his work at Fukushima after he filed a worker's compensation claim. Asahi Shimbun, a major Japanese daily newspaper, reported the man, from Kitakyushu, is now 41. He worked at the Daiichi plant near the No. 3 and No. 4 reactors from 2012 to 2013. He was diagnosed with acute myelogenous leukemia — a cancer of the blood and bone marrow, according to the Mayo Clinic — in January 2014. The word "acute" indicates "the disease's rapid progression," according to Mayo. The man quit after working at Fukushima Daiichi and developed leukemia, NHK reported.

"We are aware that a case of a cooperating company's worker who worked at [Fukushima Daiichi] was recognized for worker's compensation through reports," Satoshi Togawa, a Tepco spokesman, said in a statement. "As applying for worker's compensation is done by each employee or each employer, and recognizing this is handled by a labor standards supervision office, we are not in a position to make a comment. We offer our sincere sympathy for the cooperating company's worker."

On its Web site, Tepco extensively documents its efforts to shield recovery workers from radiation. The company differentiates between its employees and contractors — who far outnumber the company's workers at Fukushima.In August, for example, there were more than 9,000 contractors on site, but just about 1,000 employees. Contractors also received more than double the average dose of radiation employees received.

"Keeping firmly in mind that the safety of the workers and employees who are involved in the decommissioning operation is the highest priority," the Web site reads, "we are addressing the improvement of their work environment to increase efficiency through the reduction of exposure via decontamination, etc., and the reduction of their workload by simplifying protective equipment, and ensuring the thorough provision of facilities to support their physical and mental well being."

Tepco also provides monthly updates on recovery workers' radiation exposure to the ministry of health. The dose limit at the site is 1.71 mSv per month; in August, Tepco reported that the average worker was well below that, at .31 mSv. For comparison, people living in the United States receive about 6.2 mSv per year, most "from radon in the air, with smaller amounts from cosmic rays and the Earth itself," according to the Nuclear Regulatory Commission.

The Fukushima worker diagnosed with cancer experienced accumulation of exposed doses of 16 mSv, according to Asahi Shimbun. Earlier this month, radiation associated with the Fukushima meltdowns was linked to thyroid cancer in children living near the area.

"This is more than expected and emerging faster than expected," lead author Toshihide Tsuda told the Associated Press. "This is 20 times to 50 times what would be normally expected."

By The Washington Post

Environment

Indonesia fires can't be put out, Malaysian minister warns

International efforts to douse raging Indonesia fires will fail and Southeast Asia could face several more weeks of choking smoke until the rainy season starts, Malaysia's environment minister warned on Monday.

Facing growing pressure, Indonesia earlier this month agreed to accept international help after failing for weeks to douse the fires from slash-and-burn farming that have shrouded angry neighbours Malaysia and Singapore in smoke for weeks.

But Malaysia was forced once again to close schools in several areas Monday due to unhealthy air, and Natural Resources and Environment Minister Wan Junaidi Tuanku Jaafar said the crisis could continue for another month.

"Unless there is rain, there is no way human intervention can put out the fires," he told AFP on the sidelines of Malaysia's parliament session, warning that the blazes were spread across "huge areas" of Indonesia.

Even the multi-nation effort now under way "is not enough to put out the fires," he added.

"We hope the rains will come in mid-November. It will be able to put out the fires," Wan Junaidi said.

On Friday, Indonesia launched its biggest fire-fighting assault yet, with dozens of planes and thousands of troops battling the illegally started agricultural and forest fires in its territory on the huge islands of Sumatra and Borneo.

Thirty-two planes and helicopters -- including six aircraft from Singapore, Malaysia and Australia -- were deployed to back up more than 22,000 personnel on the ground.

The fires and resulting region-wide haze are an annual dry-season problem, but experts warn the current outbreak is on track to become the worst ever, exacerbated by tinder-dry conditions from the El Nino weather phenomenon.

The acrid air has sparked health alerts, sent thousands to hospitals for respiratory problems, and caused the cancellation of scores of flights and some major international events across the region.

Indonesian National Disaster Management Agency spokesman Sutopo Purwo Nugroho also offered sobering comments Monday, saying the fires were "yet to be overcome."

Sutopo said satellite data indicated Indonesia now had more than 1,500 "hotspots", which are loosely defined as areas where fires are either burning or where conditions are ripe for blazes to break out.

"The actual number is higher as the satellite is not able to penetrate the thickness of the haze in Sumatra and (Borneo)," he added.

Malaysia enjoyed a brief spell of lowered haze last week, but the government -- which has repeatedly ordered school closures across wide areas as a health precaution -- did so again on Monday as skies once again reverted to the now-familiar soupy gray.

Schools were closed in several states and in the capital Kuala Lumpur as pollution levels climbed well into the "unhealthy" range under the government's rating system.

Air quality in Singapore, however, improved Monday after entering "unhealthy" levels over the weekend.

By Yahoo

Economics

Euro set to drop European Central Bank close to more easing: Credit Suisse

NEW YORK (Bloomberg) - Look for euro weakness next week, according to Credit Suisse Group AG.

That's because Mario Draghi, the European Central Bank president, is expected to signal further monetary easing by the central bank at its Oct 22 meeting in Malta, says Credit Suisse, the top major currency forecaster for the four quarters ended June 30, based on Bloomberg rankings.

The shared currency stalled last week after gaining for the previous two amid growing speculation that the US Federal Reserve won't increase interest rates any time soon.

"Our bearish euro-dollar view is predicated on the idea that the ECB will extend quantitative easing (QE) by year-end," said Matt Derr, a foreign-exchange strategist in New York at Credit Suisse.

"We expect Draghi to verbally lay the groundwork for an extension of QE - but for the actual extension to occur at the bank's December meeting."

The 19-nation currency was little changed at EUR1.1348 against the US dollar this week in New York, after strengthening the two previous weeks. It fell 0.8 per cent to 135.58 yen.

Inflation data showed the euro area's consumer-price index slipped 0.1 per cent in September, undershooting the central bank's target and signaling more stimulus may be needed.

That's where the ECB president comes in.

"Draghi's going to be very dovish, so I think in the next couple of weeks or so I could see euro-dollar down," said Lee Ferridge, the Boston-based head of macro strategy for North America at State Street Global Markets. Ferridge, however, sees the euro strengthening into year-end.

The euro was whipsawed last week by comments from ECB officials. The currency rose Oct 16 after executive board member Benoit Coeure said expectations of ECB policy were "just too high."

The currency dropped Oct 15 when governing council member Ewald Nowotny said inflation is "clearly" missing the institution's goal.

Economists predict changes to the ECB's 1.1-trillion-euro (US$1.3 trillion) bond-buying programme, or quantitative easing, would come before any adjustment to more conventional monetary tools.

"There's a likelihood that we'll see a more dovish tone from Draghi - that could be factor that pushes the euro lower against the dollar," said Omer Esiner, chief market analyst at currency brokerage Commonwealth Foreign Exchange Inc in Washington.

By The Straits Times

Science and Technology

Scientist who found new human species accused of playing fast and loose with the truth

It remains one of the most dramatic human fossil finds of recent years. In 2013, in a tiny, cramped chamber in the Rising Star cave near Johannesburg, researchers led by palaeontologist Lee Berger uncovered several thousand bones of ancient humans. The team now concludes that these are the remains of a previously unknown species, *Homo naledi*.

The news, announced last month, made headlines around the world. However, the discovery has since become mired in controversy. Some scientists claim the bones belong to an already known species of human, *Homo erectus*. Others have criticised Berger for claiming that the remains come from a deliberate burial, while several have complained that he has not been able to date his finds.

But the real controversy has been over the manner in which Berger has revealed his work to the world. Palaeontology is a field of science noted for the amount of time senior experts take to study a single skeleton in isolation before publishing their results in an established peer-reviewed journal, while retaining tight control of the fossils they have discovered. Some take more than a decade to do so.

By contrast, Berger and his colleagues have acted with extraordinary rapidity, under the glare of *National Geographic* cameras, using teams of young researchers to help publish their results in an open-access journal while offering files that can be used by anyone with the right basic equipment to make 3D copies of Naledi skulls and bones. To say that old-school fossil-hunters disapprove would be something of an understatement.

Many senior palaeontologists believe the way the Naledi finds were revealed and analysed – in less than two years – represents a dangerous precedent, “a media circus” that threatens to split palaeontology into old and new schools and which could damage our attempts to understand the path of human evolution. Others believe it could provide the field with a major boost.

Among the critics is palaeontologist Tim White of the University of California, Berkeley. “There are many things wrong with the way we proceed in palaeontology today, in particular the slowness involved in getting discoveries and their analyses published,” he told the *Observer*. “But making sure you have got things right is also of critical importance, particularly in a science in which there are so few specimens left of any species. Rushing things, in particular to suit film-makers, is very dangerous.”

White took 15 years to publish his findings about the early apeman *Ardipithecus ramidus*. This included the three years that he took to remove its 4.4 million-year-old bones from the ground in the Afar Rift in north-eastern Ethiopia before he scanned them and then compared them with all other known fossils of a similar pedigree. Berger and his team say they did a similar job in months.

“We kept the media at bay for 10 years because you cannot do good science with reporters breathing down your neck,” said White. “By contrast, Berger brought them in from the start and had them filming everything they were doing, and that had a harmful impact on their work. Cameramen and producers cost money and things get rushed as a result.”

Other critics allege that bones from the Rising Star cave were clearly damaged by excavators working in haste. Many fragments have white patches that represent fresh breaks which, in turn, are blamed on the speed at which the chamber’s excavators were working.

But Berger – who is based at the Evolutionary Studies Institute at the University of Witwatersrand – flatly rejected this criticism. “Before we started the dig, we could see the white patches on the bones and realised they had been caused by recent breakages,” he told the *Observer* last week. “The point is that this is a chamber that was widely used by amateur cavers and they were the ones who were causing the damage. That is why we went in so quickly – to stop further damage.”

The fact that Berger used women cavers to retrieve Naledi bones – on the grounds that they were the only ones small enough to get into the chamber – has only irked his critics even more. One said: “There are many male cavers who could get in there, but that would have spoiled the publicity stunt.”

The disconcerting speed of Berger’s actions did not cease with the removal of the chamber’s 1,500 pieces of Naledi fossils, however. Having taken them out, he called a workshop in Johannesburg to which he invited all interested “early career”

specialists – those who had just completed their PhDs or later post-doctoral work in the field of human evolution, an approach that contrasts with the more normal, lengthy process that involves a handful of highly expert scientists refining and defining their data about a new species in virtual isolation. “Essentially we had the numbers, so we could move more quickly,” said Berger.

However, anthropologist Christoph Zollikofer – of the University of Zurich – disagrees. He was involved in the discovery of a series of early humans in Georgia, with findings that took more than seven years to publish. “There were things we simply did not understand, and we worked for years to verify our findings,” he told the journal *California*. This did not happen with Berger.

Then came the search for a journal in which to publish their results. Berger said he avoided “high-impact” journals like *Nature* or *Science* because their peer-review process – in which fellow academics scrutinise their counterparts’ work – took so long. Instead, he chose eLife, an online, open-access journal which – like other such journals – has a quicker, far easier peer-review process than long-established rivals.

“The process was much better, much less clubby than at the big journals, where a very few reviewers can have disproportionate influence on what is published,” added Berger.

Not everyone agrees. Many say eLife’s peer reviewing was lax and that the journal’s papers about Naledi contain errors. For example, some of Berger’s conclusions about *Homo naledi* being a separate species from *Homo erectus* are based on differences in cranial features. He says the former has an external occipital protuberance – a bump at the back of its skull – but *Homo erectus* does not. “In fact, *Homo erectus* does have an occipital protuberance,” said White. “It’s a very basic mistake.”

However, Chris Stringer of the Natural History Museum defended Berger’s approach: “The creation of a new human species is always going to be controversial,” he told the *Observer*. “Nevertheless, Berger has published his material quickly and in some detail via open access. Any serious researcher can now apply to study the material themselves. Files can also be downloaded free of charge to make 3D copies of the fossils, so people can make up their own minds. We were able to look at a 3D copy of the most complete jawbone only two days after publication. This is a very refreshing approach to the study of human fossils.”

This last point – the availability of free 3D copies of skulls, a first in human palaeontology – was also stressed by Kent University palaeontologist Matt Skinner, one of the early career scientists who was called to aid Berger to analyse the Naledi bone fragments.

“I need copies of key skulls to show my students,” he said. “It is critical to their understanding of human evolution that they get to handle them. But casts of many of the most important skulls are still unavailable years after they were finally described in *Nature* or *Science*. I think it is a bit cheeky that researchers are able to push their careers forward by publishing about fossils like *Ardipithecus* but still do not make these finds available in copies that can be shown to students. My generation of academics is getting a bit fed up with that sort of thing. Hopefully things are now going to change.”

By The Guardian

Under the Macroscope is a weekly summary of what's happening around the world and what's worth pondering. Stay on top of international and local news with this bulletin produced by the Raffles Economics and Current Affairs Society