

News in brief



DOGS CAUGHT CORONAVIRUS FROM THEIR OWNERS, GENETIC ANALYSIS SUGGESTS

The first two dogs reported to have coronavirus probably caught the infection from their owners, say researchers who studied the animals and members of the infected households in Hong Kong. An analysis of viral genetic sequences from the dogs showed them to be identical to those in the infected people.

Researchers suspected that the infection had been passed from the owners to the dogs, and the direct genomic link strongly supports that, says Malik Peiris, a virologist at the University of Hong Kong who led the study, which was published in *Nature* (T. H. C. Sit *et al.* *Nature* <http://doi.org/dvt4>; 2020).

The study showed no evidence that dogs can pass the infection to other dogs or to people, but it is impossible to be certain in which direction the virus travelled “so we have to keep an open mind”, says Peiris.

Although the analysis confirms that people with COVID-19 can infect dogs, the probability of this happening is low, says Arjan Stegeman, a veterinary epidemiologist

at Utrecht University in the Netherlands. In the study, only 2 of the 15 dogs who lived with infected people got the disease.

Since the infections in the two canines in Hong Kong – a Pomeranian and a German shepherd – were reported, other pets have tested positive for the SARS-CoV-2 virus, including a cat in Hong Kong and another two in New York state. Four tigers and three lions at New York City’s Bronx Zoo also tested positive. Studies in cats have found that they can pass the virus to other felines.

The Hong Kong study detected viral RNA and antibodies in both dogs, and live virus in one of them. Neither dog became noticeably sick.

The findings support the results of an April study, in which researchers in China infected dogs with SARS-CoV-2, says Thomas Mettenleiter, a virologist at the Federal Research Institute for Animal Health in Riems, Germany. Dog owners who test positive for the coronavirus should be cautious when handling their pets, he says.

PUBLISHERS UNITE TO TACKLE ALTERED IMAGES

The world’s largest science publishers are teaming up to establish standards for catching suspicious images in research papers. A new working group – the first formal cross-industry initiative to discuss the issue – aims to set standards for software that screens papers for altered or duplicated images during peer review.

Journal editors have long been concerned about how best to spot altered images, which can result from honest mistakes or efforts to improve the appearance of images, as well as from misconduct. So far, most journals haven’t employed image-checkers to screen manuscripts, saying that it is too expensive or time-consuming; and software that can screen papers on a large scale hasn’t been available.

The new cross-publisher working group aims to lay out minimal requirements for software that spots problems with images, and to look at how publishers could use the technology across hundreds of thousands – or even millions – of papers.

The group began meeting in April, having been set up by the standards and technology committee of the STM, a global trade association for publishers, based in Oxford, UK. It includes representatives from publishers including Elsevier, Wiley, Springer Nature and Taylor & Francis.

“The ultimate goal is to have an environment that helps us, in an automated way, to identify image alterations,” says the group’s chair, IJsbrand Jan Aalbersberg, who is head of research integrity at Elsevier.



CORONAVIRUS HINDERS AUTOPSIES, DEPRIVING RESEARCH OF CRUCIAL TISSUE

As researchers worldwide struggle to understand COVID-19’s effects on the body, they are clamouring for tissue samples from patients. But the raging pandemic and ongoing lockdowns have complicated efforts to do autopsies and collect the tissue needed to understand how the coronavirus attacks organs including the lungs, heart and brain.

Autopsies are always painstaking work, but the pandemic means that health-care systems are overwhelmed, protective equipment is in short supply and pathologists are at high risk of infection.

But some researchers have found ways around the obstacles. Pathologist Marisa Dolhnikoff at the University of São Paulo and her colleagues have been performing minimally invasive autopsies using needle biopsies to understand why some patients develop blood clots.

Researchers now want to collect and share such samples and results systematically. A team of pathologists including Roberto Salgado at the GZA-ZNA Hospitals in Antwerp, Belgium, is creating a global COVID-19 pathology repository. The group is working with the World Health Organization to create guidelines for the safe collection of autopsy samples and a standardized way of recording the results.