

## Stop AMR Global Media Monitor

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<u>New antibody technology for monitoring MS patients</u> may have potential in COVID-19 testing

Queen Mary University of London published a study in which they demonstrated the effectiveness of a novel light technology to monitor the presence of anti-drug antibodies in the treatment of multiple sclerosis (MS). It is an important feature as such antibodies could prevent an effective treatment and could induce drug resistance.

Aside of this study, the technology was calibrated to discover COVID-19 antibodies, helping to determine whether the tested patients had previously been infected with the virus.

Made by the immune system to fight infections, antibodies can serve as drugs to fight diseases.

A common drug used in MS treatment, Alemtuzumab, is a concentration of antibodies. As a protection mechanism, viruses and bacteria can develop anti-drugs antibodies, preventing Alemtuzumab to work as efficiently as it should.

Source: EurekAlert, 4 June 2020

## A potential new weapon in the war against superbugs

Researchers at the University of Melbourne are investigating ways to fight superbugs; their findings could help us in our fight against coronavirus complications. While evolving, bacteria develop strategies to counteract antibiotics. If they develop multiple resistance strategies, bacteria can morph into superbugs, resisting most available treatments, which can cause potentially lethal infections.

The team demonstrated that a natural antibiotic, teixobactin, could be effective in treating bacterial lung conditions such as tuberculosis and the one associated with COVID-19.

This discovery could lead the path towards a new generation treatment for resistant bacteria. Teixobactin

was discovered in 2015 by a team led by Professor Kim Lewis at Northeastern University in Boston in 2015.

## Source: EurekAlert!, 3 June 2020

Antibiotic-destroying genes widespread in bacteria in soil and on people

A new research found that genes inducing antibiotic resistance are commonly widespread in bacteria populations living in the soil and on people. Scientists highlighted that some discovered resistance genes confer them the ability to destroy all tetracyclines, including the latest generation of these antibiotics. Last developed tetracyclines are a class of powerful, first-line antibiotics, designed to fight bacteria resistant to all previous generations.

Researchers combined tetracyclines with a new chemical compound, coating and protecting tetracyclines from destruction. While administrated in combination, the antibiotic's lethal effects were restored.

The findings indicate that the most widely used classes of antibiotics are facing an emerging and growing threat but also that solutions are existing to protect antibiotics' efficiency.

"We first found tetracycline-destroying genes five years ago in harmless environmental bacteria, and we said at the time that there was a risk the genes could get into bacteria that cause disease, leading to infections that would be very difficult to treat," said co-senior author Gautam Dantas, PhD, a professor of pathology and immunology and of molecular microbiology at Washington University School of Medicine in St. Louis. "Once we started looking for these genes in clinical samples, we found them immediately. The fact that we were able to find them so rapidly tells me that these genes are more widespread than we thought.".

Source: EurekAlert!, 2 June 2020



Danish officials search for source of Campylobacter outbreak

An ongoing Campylobacter outbreak on a Danish island could have affected up to 100 people. The Danish Veterinary and Food Administration (Fødevarestyrelsen), DTU Food Institute and Statens Serum Institut (SSI) are investigating the outbreak that began in Bornholm in early June. The Bornholm hospital was the first one to raise the alarm and at the moment, 10 patients are in need of hospital treatment. 54 people, aged from 9 months to 97 years old, have already been tested positive.

Source: Food Safety News, 7 June 2020

Study finds people believe false info about COVID-19 and food safety

A study involving 3,781 participants delivered worrying results. Participants were asked to answer to 25 statements whether they viewed them as 'correct', 'incorrect', or 'not sure'. 43% of participants answered that to consume fruits and vegetables previously washed with soap or diluted bleach was sure. Doctoral researcher Alex Ruani said "It's not safe to wash your fresh produce with soap or diluted bleach. But, quite worryingly, we found that many people might be engaging in this harmful food practice despite food authorities' warnings."

Source: Food Safety News, 6 June 2020

Pandemic total passes 6.5 million fueled by multiple hot spots

6.5 million peoples have been infected by COVID-19 so far. Numbers are still quickly rising in Latin American countries and in India and Iran, a country experiencing a second spike in infections. Almost 390,000 deaths occurred, and Brazil reported, yesterday only, more than 27,000 new cases.

While Sao Paulo and Rio de Janeiro are still the main epicentres in the country, COVID-19 activity now starts to infect indigenous communities, where deaths rose from 28 to 182 in a month only. For global health officials, this rise is an important concern as most of the native populations are located far from any intensive care units.

Source: CIDRAP, 4 June 2020

<u>New outbreak of Ebola virus disease detected in the</u> <u>Democratic Republic of the Congo (DRC)</u>

Bobo Boloko Bolumbo, a region's governor in DRC, announced that an Ebola Outbreak started. It was later on confirmed by the DRC's Minister of Health and WHO's Director General. Additional staff will be deployed to Mbandaka to set all preventive and curative measures in motion. The previous Ebola outbreak, in 2018, lead to a total of 54 cases including 33 deaths.

Source: ECDC, 2 June 2020