

E-NEWS LETTER

Master of Computer Applications

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VISION & MISSION OF THE DEPARTMENT

Vision of the Department

- Flourish the SRMS as the world leader in computer application through continuous research & development directed towards the betterment of the society.
- Establish the cooperative learning for facilitating the quality academics, state-of-the-art research and remarkable development activities.
- Establish world-class resources especially Research & Development laboratories, value addition, courses etc. for the in-house up gradation and community service.
- Groom the students into industry-ready professionals through a rigorous training in a self-disciplined environment.
- Groom the learned pool of faculty in accordance with the recent advancements in the field of computing technologies & their applications.

Mission of the Department

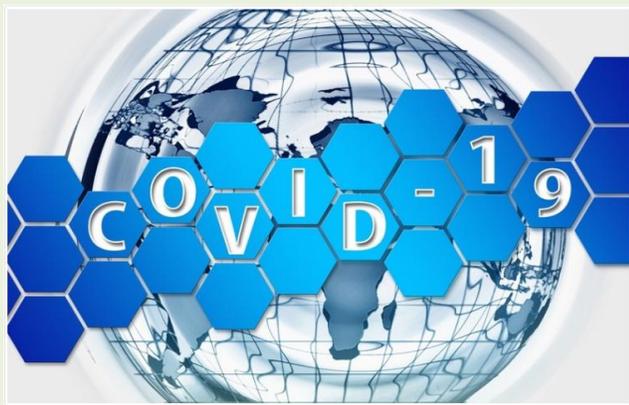
- **M1.** To provide qualitative education and generate new knowledge by engaging in cutting-edge research and by offering state-of-the-art postgraduate programme, leading to careers as Computer and IT professionals in the widely diversified domains of industry, government and academia.
- **M2.** To promote a teaching and learning process that yields advancements in state-of-the-art in computer application, resulting in integration of research results and innovations into other scientific disciplines leading to new technologies and products.

- **M3.** To harness human capital for sustainable competitive edge and social relevance by inculcating the philosophy of continuous learning and innovation in Computer Application.

LATEST UPDATES WORLD

Blockchain Technology and COVID-19

The COVID-19 corona virus has impacted countries, communities and individuals in countless ways, from school closures to health-care insurance issues not to undermined loss of lives. As governments scramble to address these problems, different solutions based on blockchain technologies have sprung up to help deal with the worldwide health crisis



A blockchain is an essential tool for establishing an efficient and transparent healthcare business model based on higher degrees of accuracy and trust because technology is a tamper-proof public ledger. Blockchain will surely not prevent the emergence of new viruses itself, but what it can do is create the first line of rapid protection through a network of connected devices whose primary goal is to remain alert about disease outbreaks. Therefore, the use of blockchain-enabled platforms can help prevent these pandemics by enabling early detection of epidemics, fast-tracking drug trials, and impact management of outbreaks and treatment.

But before we explore in detail the possible ways of using Blockchain to help in fighting this

invisible enemy, we need to understand some of the challenges defining this deadly virus.

Major Challenges of COVID-19

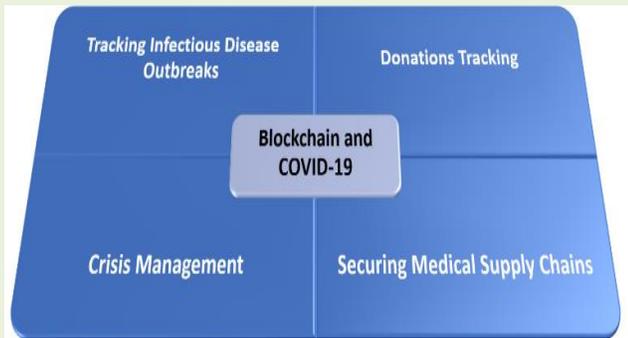
- One major issue is how prepared the world's health systems are to respond to this outbreak.
- Tracking a huge population of infectious patients to stop epidemics.
- Another is the immediate requirement for developing better diagnostics, vaccines, and targeted therapeutics.
- Misinformation and conspiracy theories spread through social media platforms.
- Various limitations while accessing the tools when required.
- No adequate measures to adopt in a crisis situation.

Can Blockchain help in preventing pandemics?

With Blockchain we can share any transaction / information, real time, between relevant parties present as nodes in the chain, in a secure and immutable fashion. In this case, had there been a blockchain where WHO, Health Ministry of each country and may be even relevant nodal hospitals of each country, were connected, sharing real time information, about any new communicable disease, then the world might have woken up much earlier. We might have seen travel restrictions given sooner, quarantining policies set sooner and social distancing implemented faster. And may be fewer countries would have got impacted.

What every country is doing now fighting this pandemic, would have been restricted to fewer countries and in a much smaller scale. The usage of a Blockchain to share the information early on, might have saved the world a lot of pain.

The world had not seen anything like COVID-19 pandemic before in the recent history. Today we need to take a hard look at the reporting infrastructure available for communicable diseases, both technology and regulations and improve upon that, such that we do not need to face another pandemic like this in the future.



Blockchain Applications in fighting COVID-19

Tracking Infectious Disease Outbreaks

Blockchain can be used for tracking public health data surveillance, particularly for infectious disease outbreaks such as COVID-19. With increased blockchain transparency, it will result in more accurate reporting and efficient responses. Blockchain can help develop treatments swiftly as they would allow for rapid processing of data, thus enabling early detection of symptoms before they spread to the level of epidemics.

Additionally, this will enable government agencies to keep track of the virus activity, of patients, suspected new cases, and more.

Donations Tracking

As trust is one of the major issues in donations, Blockchain has a solution for this issue.

There has been a concern that the millions of dollars being donated for the public are not being put to use where needed.

With the help of blockchain capabilities, donors can see where funds are most urgently required and can track their donations until they are provided with verification that their contributions have been received to the victims. Blockchain would enable transparency for the general public to understand how their donations have been used and its progress.

Crisis Management

Blockchain could also manage crisis situation. It could instantly alert the public about the Coronavirus by global institutes like the World Health Organization (WHO) using smart contracts concept.

Not only it can alert, but Blockchain could also enable to provide governments with recommendations about how to contain the virus. It could offer a secure platform where all the concerning authorities such as governments, medical professionals, media, health organizations, media, and others can update each other about the situation and prevent it from worsening further.

Securing Medical Supply Chains

Blockchain has already proven its success stories as a supply chain management tool in various industries; similarly, blockchain could also be beneficial in tracking and tracing medical supply chains.

Blockchain-based platforms can be useful in reviewing, recording, and tracking of demand, supplies, and logistics of epidemic prevention materials. As supply chains involve multiple parties, the entire process of record and verification is tamper-proof by every party, while also allowing anyone to track the process.

This technology could help streamline medical supply-chains, ensuring that doctors and patients have access to the tools whenever they need them, and restraining contaminated items from reaching stores.

WHO and Blockchain Technology

The World Health Organization (WHO) is working with blockchain and other tech companies on a program to help convey data about the ongoing COVID-19 pandemic, named #MiPasa.

The program is a distributed ledger technology (DLT) that will hopefully help with early detection of the virus and identifying carriers and hotspots.

MiPasa is built on top of Hyperledger Fabric in partnership with IBM, computer firm Oracle, enterprise blockchain platform HACERA and IT corporation Microsoft. It purports to be “fully private” and share information between need-to-know organizations like state authorities and health officials.

Described by creators as “an information highway,” MiPasa cross-references siloed location data with health information. It

promises to protect patient privacy and to help monitor local and global trends such as the virus that has now sent the world spiraling into chaos and uncertainty in recent weeks.

The U.S., European, and Chinese Centers for Disease Control and Prevention, the Hong Kong Department of Health, the Government of Canada and China's National Health Commission have all worked with the project.

DEPARTMENT ACTIVITY

SRMS Uncut Video Theme for Social Media

(Concept Note - With the pandemic hitting us for two years constantly, it has left us with a mix of feelings, some happy, some sad. It also led us to learn new things, value time, value the presence of people around us, and hence been a roller coaster ride.)

In this reference Mr. Vijay Kumar Dubey, Assistant Professor, Department of MCA, Mohd. Asad Khan and Samiksha Singh, students of MCA 1st year share their thoughts.



FACULTY CORNER

Roche's COVID-19 antibody cocktail launched in India

Antibody cocktail is to be administered for treatment of mild to moderate coronavirus disease in adults and pediatric patients who are confirmed to be infected with SARS-COV2 and are at high risk of developing severe COVID-19 disease and do not require oxygen

Roche India and Cipla Limited, in a joint statement today, said the first batch of the antibody cocktail -- Casirivimab and Imdevimab - is now available in India, while a second batch will be made available by mid-June. The price for each patient dose, a combined dose of 1,200 mg (600 mg of Casirivimab and 600 mg of Imdevimab), will be Rs 59,750, inclusive of all taxes. The MRP for the multi dose pack, each pack can treat two patients, is Rs 119,500.

The antibody cocktail is to be administered for the treatment of mild to moderate coronavirus disease in adults and pediatric patients (12 years of age or older, weighing at least 40 kg) who are confirmed to be infected with SARS-COV2 and are at high risk of developing severe COVID-19 disease and do not require oxygen.



The cocktail has been shown to help these high-risk patients before their condition worsens, reducing the risk of hospitalisation and fatality by 70 per cent, the company said. As per Roche India, the antibody cocktail can potentially benefit 200,000 patients as each of the 100,000 packs that will be available in India offers treatment for two patients.

What's Roche's antibody cocktail

- The antibody cocktail (Casirivimab and Imdevimab) is a medical product that can be procured after a medical prescription by a registered medical practitioner
- Casirivimab and Imdevimab can only be administered in settings in which health care providers have immediate access to medications to treat an infusion reaction, such as anaphylaxis

- The intravenous administration takes about 20 to 30 minutes. For the subcutaneous route, four syringes of 2.5 ml (2 each of Casirivimab & Imdevimab) need to be administered concurrently at four different sites on the abdomen or thigh
- Patients should be monitored during the infusion and observed for least one hour after the completion of the infusion and 15--30 minutes after the subcutaneous injection
- Each pack of antibody cocktail contains one vial of Casirivimab and one vial of Imdevimab, totaling 2,400 mg of the antibody cocktail.
- Each pack can treat two patients as the dosage per patient is a combined dose of 1,200 mg (600 mg of Casirivimab and 600 mg of Imdevimab) administered by intravenous infusion or subcutaneous route.
- The vials need to be stored at 2 degree C to 8 degree C. If opened for the first patients' dose, a vial can be used for the second patients' dose within 48 hours if stored at 2 degree C to 8 degree C.

How to buy the product?

The antibody cocktail drug -- Casirivimab and Imdevimab -- will be available through Cipla's distribution network across the country. Healthcare institutions, both private and public can place an enquiry by reaching out to their nearest Cipla distributor.

*Mr. Abhay Singh Bhadauria
Assistant Professor
Department of MCA*

COLLEGE UPDATE

The college was closed due to summer vacation from 1st May to 22nd May 2021 for the faculty and students.

College reopens from 24th May and online assessment for Unit-I was conducted from 22nd onwards for MCA first year students.

MCA Department restarted to conduct all the online classes from 27th onwards as per the instructions of AKTU.

STUDENT CORNER

प्रेरक कविता

मुश्किल बड़ी घड़ी है
संयम बनाये रखना
एक फ़ासला बनाकर
खुद को बचाये रखना

है जिंदगी नियामत
असमय ये खो ना जाये
इस देश पर कोरोना
हावी ना होने पाये
ये वक्त कह रहा है
घर से नहीं निकलना

निज शक्ति को बढ़ाना
संकल्प से ही अपने
इस रोग को हराना
हाथों को अपने साथी
कई बार धोते रहना

उनको नमन करें हम
सेवा में जो लगे हैं
सब कुछ भुला के अपना
दिन-रात जो जुटे हैं
रहकर सजग हमेशा
अफ़वाहों से भी बचना

मुश्किल बड़ी घड़ी है
संयम बनाये रखना

*Gitanjali Joshi
MCA 1st Year Student*