

# Blockchain technology proposed for the delivery of COVID-19 vaccines



A Mexican from [Tec de Monterrey](#), who has created a project using **Blockchain technology** to safely distribute future **COVID-19 vaccines**, has received an award from MIT for his proposal.

**José Feregrino** took part in the [MIT COVID-19 Challenge: Latin America vs COVID-19 competition](#) with his project “**Routine Immunization with Blockchain**”, which was recognized as **being among the top 3** in the “Supporting the health systems” category.

The competition, organized by the American university, was a **virtual hackathon** that sought to **propose innovative solutions** to help tackle the **current COVID-19** pandemic.

*“The idea of the proposal is to have a perfectly designed plan in place for the equitable distribution of the vaccine, when it is discovered, and not to waste time in getting it to everyone,”* said the Tec graduate.

## A vulnerable supply chain



60% waste

Source: UNICEF



Fake Vaccines



Lack of data

Cold Chain



Corruption

## width="1366" loading="lazy"> BLOCKCHAIN FOR VACCINES

Using **Blockchain technology**, José developed “Routine Immunization” together with **Tonatiuh Delgado**, a student at the **University Center for Sciences at the University of Guadalajara**, and Peruvian doctor **María Rosario**.

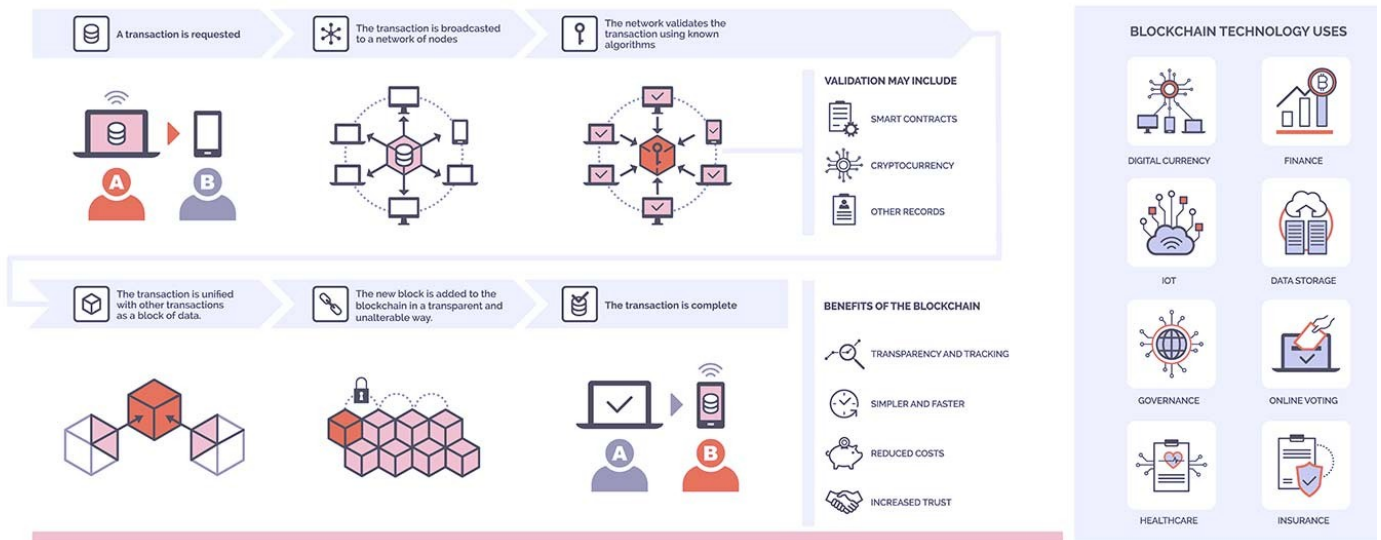
**Blockchain** technology allows us a **single, agreed, and distributed** data set which generates a record of each transaction.

By using this technology, vaccines **can be delivered from their source to end-users** with **traceability, transparency, and fairness**.

According to the [United Nations Children’s Fund \(UNICEF\)](#), **60% of vaccines** become expired during shipping to end-users.

“**Routine Immunization with Blockchain**” is an app with which you can **scan the code of each vaccine** to trace it, **using distribution and application data uploaded in real-time**.

# HOW DOES BLOCKCHAIN WORK



width="1366" loading="lazy">

*“We want to have real-time data for each of the vaccines so we can have greater control over them and look after them better,”* said José.

**With this data, we will have information about those who are receiving immunity,** as well as the location and the temperature data necessary to be able to preserve the vaccine.

The project was a prototype but, after being recognized as being among the best in the **MIT COVID-19 CHALLENGE**, the **Tec graduate’s team hopes that, with the help of MIT, it will become a reality.**

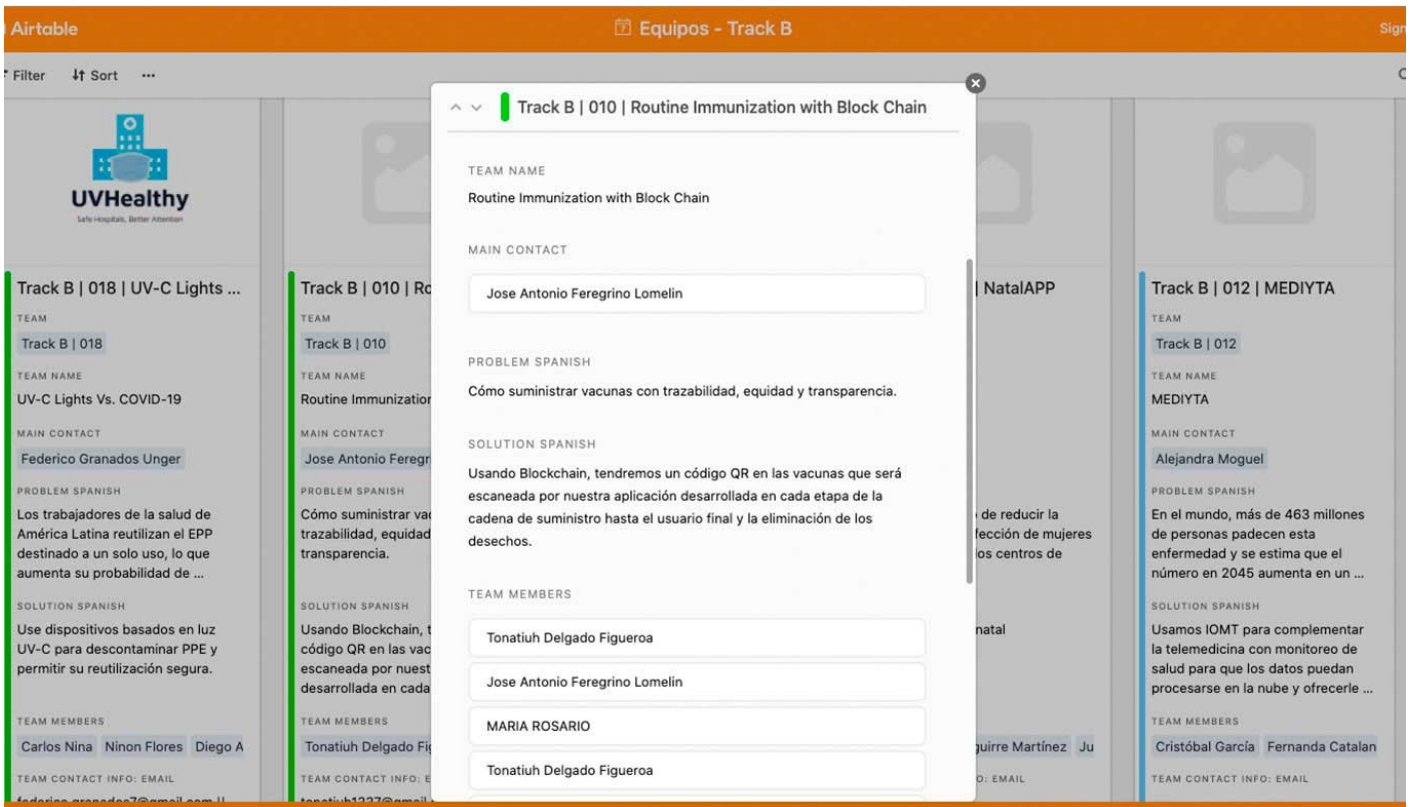
<https://twitter.com/freddytn/status/1274813945233145861/photo/1>

*“We want to contribute to stopping the pandemic but, above all, to avoid expired vaccines so that they can all reach the public,”* confirmed José.

## THE CHALLENGE

The **COVID-19 Challenge** is a series of **virtual hackathons** in which **multidisciplinary teams** collaborate to develop **innovative solutions** that can help tackle the **COVID-19 crisis**.

**Latin America vs COVID-19** was part of the MIT initiative which brought together more than **1,500 participants from universities around the world**. The university is ranked #1 according to the **QS World University Rankings 2020**.



width="1366" loading="lazy">

**The event** took place virtually from **June 19 to 21** and consisted of participants working for **48 hours** on different proposals **providing short-term (3-6 month) solutions that will have significant impact** in Latin America.

These **innovative proposals** would not only provide **solutions to issues within healthcare systems**, but also help the **most vulnerable people, prevent the spread of disinformation, and support the informal economy**.

**READ MORE NEWS AT CONECTA:**

<https://tec.mx/es/noticias/nacional/salud/el-mexicano-que-avanza-para-lograr-una-vacuna-vs-covid-19>