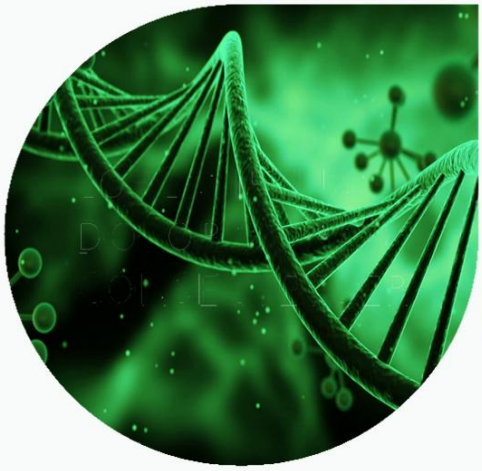
HUMAN PRACTICE JOURNAL

A global genetic engineering project present by
Universitas Indonesia



FINDING DIPHTHY

UNIVERSITAS
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A Day with Diphthy

First Public Engagement and Booth Exhibition

Characterization of event

Rotunda UI is a park located in Depok, West Java. This place usually used for sport activity such as running and jogging for Depok community, which is ideal place to initial a campaign.

Description of the Event

In Saturday, 10th February 2018, as an initial step for our project socialization: Finding Diphthy, our team open a booth around Rotunda UI. In this social engagement we give **free blood pressure check and cholesterol level check.** After they get the services, our team will start take a quick survey about how aware they are about diphtheria outbreaks then socialize them with our project as response solution for this outbreak.

Goals

This event marks first public engagement from Universitas Indonesia iGEM team. T**he goal of this event is to give awareness about diphtheria outbreak and warn the people about its symptom.** Moreover, we also engage the community to know about genetic engineering through our project.

Target Audiences and Impact

Around 50 peoples ages from 20-60 mostly family member who lives near depok get engagement on this booth. “I’m very interested with this project, if UI can really found diagnosis devices for diphtheria it would be very helpful for Indonesia” Razak, (56) one of the participant said.

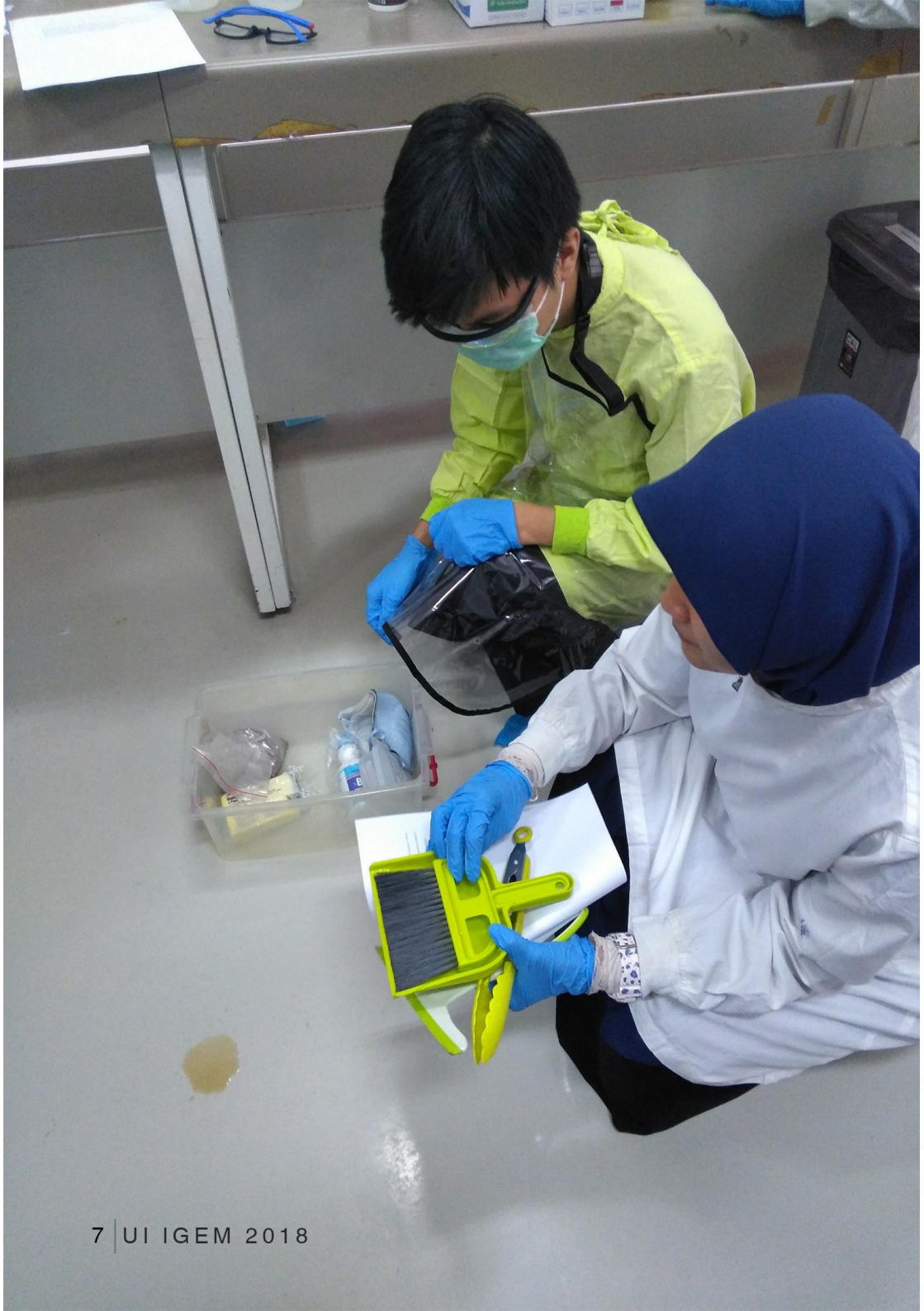
Community Visit to Pondok Cina:
Community who live near a community rail

Goals
This event created to testing how aware people who live in Pondok CIna about diphtheria illness and its outbreak. After that we continue the activity by socialize them about Diphthy project.

Target Audience
Citizen wlo live near a railway Pondok Cina, street vendors, train passenger, and pedestrian who passed Pondok Cina station.

Characterization of the event
Pondok Cina is area in Depok West Java which mostly consist people who coming from grassroot society. Around 12 diphtheria cases detected on Depok from range Oktober-December 2017. Diphtheria cases mostly coming from grassroot community. Unhealthy lifestyle and poor sanitation become major factor for this outbreak. on this community.

Description of the Event
Team start the event with reach the target audience by door to door. We conduct a question to testing how much they aware about diphtheria outbreak, its outspread, and how to cope if there's any diphtheria symptom detect on their family. We give an information pamphlet about diphtheria as a tools to inform them.



Biosafety & Biosecurity Training at PRVKP UI

Research Center of Virology and Cancer Health Services Pathobiology (PRVKP), Faculty of Medicine, University of Indonesia is one of the best research centers in Indonesia. PRVKP accommodates research activities focused on the agents that cause diseases such as virus and cancer in humans. In addition,. Other activities that are also conducted by PRVKP, which supports research and education purposes, is training, seminars and others.

IGEM University of Indonesia 2018 attend a series of Biosafety & Biosecurity training at PRVKP to enhance our knowledge in biomedical laboratory techniques, including basic safety and safety requirements to prepare. Such knowledge will surely produce accurate and non-harmful results for the surrounding environment in our researches at the laboratory. Researches with biological agents, proper use of chemicals, as well as good laboratory techniques require studies in the safety aspects of biological materials.

On the first day of the training, IGEM UI 2018 team obtained lessons on Biosafety, Biosecurity, Code of Conduct and Dual Use Research. This will deepen our knowledge of techniques and equipment to protect ourselves, also the environment from exposure to biological agents; potentially causes illness, mitigation action, and misuse of a pathogen or toxin into the environment. In addition, IGEM UI 2018 also study microbiology techniques including biological hazards.

Second day, we received material on bio-risk management, risk assessment and good laboratory practice. Through this lesson, the team correctly following the steps in doing research at the laboratory; reducing the risk of accidents that may occur. Such steps are, but not limited to, using the right clothes in the laboratory, the correct way of sampling and the proper procedure of sharps and harmful substances disposal.

Third day, IGEM UI 2018 studied a variety of techniques that could support research such as polymerase chain reaction (PCR); it is a method to multiply or replicate large amounts of DNA in a short time. The DNA recombinant technique is a technique for combining or recombining two or more strands of DNA thread that in normal circumstances not pairing or occurring together. In addition, IGEM UI 2018 also study the techniques of serology, cell culture, etc.

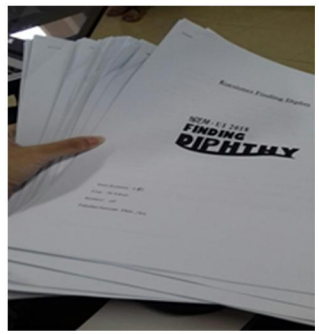
Last day, IGEM UI 2018 received a lesson on emergency response, which is useful to know the effective response to emergency situations; minimizing the effects of emergency situations. In the last day, the team also conducted a lab practice to simulate directly the lesson that have been learnt in the last 4 day. IGEM UI 2018 are very excited in participating the training.

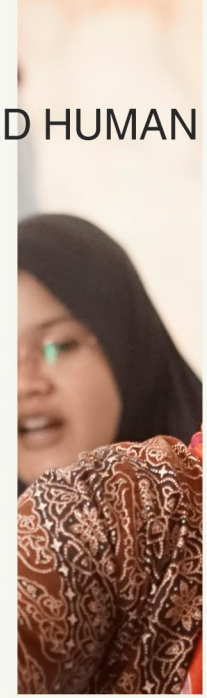
CAMPUS CAMPAIGN

The news of diphtheria outbreak that lately happened in Indonesia, especially in West Java, is widely spread over the country. Our team considers that the solution of it—which is our project, Finding Diphty—has to work the same, widely spread. Campus campaign as a start of our public engagement is aiming to raise public awareness about our project and gaining public opinion about Finding Diphty.

Campus campaign was held in Faculty of Public Health, Universitas Indonesia in February 2018 and was attended by the faculty students. This target is considered suitable for our project since they are in the exact place where the outbreak happened, which is Depok City. Meanwhile, the age of the students is still considered as a risk population of this outbreak

In this campaign, our team brings up the diphtheria outbreak case and our project: how it works, how we make it, how it would impact the outbreak and society, and also the comparison to previous diagnostic method. We purposely give a deep explanation about Finding Diphty to the students so that they—as public and a risk population—can understand the solution and criticize our project. In the end of the session, we held a mini survey by giving them a questionnaire according to our project and their opinion and advice about it. This campaign and mini survey is used to direct our project based on the society needs and views, for our project will also impact the society too.





BUILDING COMMUNITY

Community Outreach Journey at
CIkidang Village, Sukabumi, East Java

THE STORY

Our team understands that the future implementation of Finding Diphty Project will need a real foundation from any society levels. Through KERSOS, we are aiming to reach the grass-root level. Not only focusing on educating the people about diphtheria outbreak and our project, moreover we want to know about their health needs. From the insights, we understand how our project would affect the society's life.

KERSOS was held in collaboration with the Faculty of Engineering, Universitas Indonesia. It was held in 4-8 June 2018 and took place at Cikidang Village, Sukabumi,West Java. In here, our team took part in training the volunteers of KERSOS to give a talk to the villagers about health issue related to diphtheria and also about Finding Diphty Project in brief. The volunteers then came door to door toward the houses to explain all the issues and approach the villagers. This method was purposely applied so that our team can engage more people (the volunteers and also the villagers) in our project.

In the end of the socialization, our team did some follow ups to the villagers directly to make sure they got the right information and to measure how far their understanding about the issues. In the follow up, we got the insights from their testimonies about how important our project and how it would beneficially affected their health. Moreover, they consider it as a "friendly-user" diagnostic tool since it can be used by everyone without really depending to the health officer. They also consider it as a relevant solution, for it would be accessible for them who are still hard to reach nearest PUSKESMAS (health center) or hospital.

Besides the socialization, in collaboration with KERSOS FTUI Committee, we build some lavatories and any sanitary facilitation for the villagers. We also patched stickers of the right steps to wash hands in every house to remind the villagers in keeping their hands free from bad-bacteria. Those was aimed to prevent and minimize the risk of diphtheria outbreak to happen in that location since diphtheria can caused by the bad quality of sanitation and health habits.

THE JOURNEY

1

In the morning, all Volunteers standby at village hall to get instruction from UI IGEM Team

2

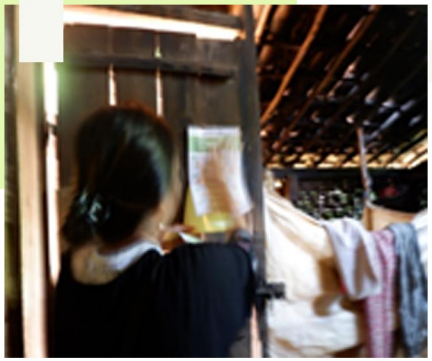
After get the instruction, volunteers form group team and start socialize '101 Healthy Habits' to the villagers. There're around 60 families on this village

3

At the same time, male volunteers help the village by building lavatories

4

On Afternoon, UI IGEM team follow up the villagers, collect the feedback and re-highlight the issue

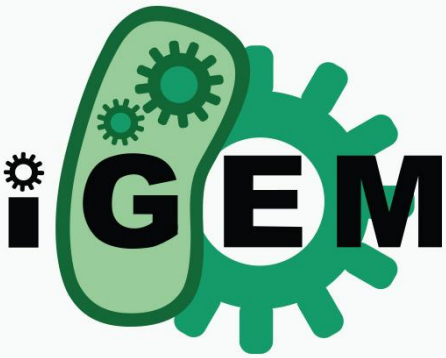


5

Volunteer patching Sticker 'Prevent Diphtheria Start From Wash Hand" in Villager's House

6

Sticker as Health Promotion Tools already patched on their house. This will be help the villagers to keep remember their new better habit for sanitation.



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