



EPIHACK

March 4-7, 2014

Chiang Mai, Thailand



1. THE WHY BACKGROUND

Welcome to
Epihack!

Participatory
Digital One Health
in Chiang Mai

Hack-a-thon;
marathon hacking



2. THE WHAT PRACTICAL INFORMATION

Date

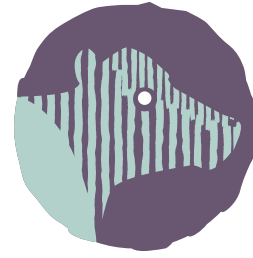
Venue

Accommodation

Meals

Dress code

Contact



1. THE HOW AGENDA

Digital Disease
Detection (DDD)

First day

Second day

Third day

Final day



4. THE WHO ORGANISERS

Skoll Global
Threats Fund

Chiang Mai
University

Opendream



5. ADDITIONAL OUTREACH

Social media
and collaborative
'timeline'

Welcome to EpiHack Chiang Mai

Dear Delegates,

It is with great excitement that we welcome you to collaborate as a team of enthusiastic technology experts and human and animal health professionals to hack for better One Health in Chiang Mai!

Asia is a dynamic hub for technological progress. It is also home to widespread diseases, including many strains of influenza such as those commonly known as “bird flu” or “swine flu”. The upcoming hack-a-thon is the first of its kind in Chiang Mai and aims to bring together animal and human health professionals and technology experts to create a prototype for human, animal and environmental digital disease detection during the course of four days.

EpiHack Chiang Mai provides an intensive environment to explore, develop, integrate and improve technological solutions in order to detect and minimise the impact of contagious diseases, which, if left unchecked, could lead to a pandemic that knows no borders. The hack-a-thon further emphasizes Chiang Mai’s role as a global leader in One Health surveillance.

The four-day EpiHack will reveal how technology can empower citizens and support institutions. This event marks an important milestone towards building a firm foundation for talented technology and health experts to contribute to a healthier Thailand!

Let’s hack for One Health!

Participatory Digital One Health in Chiang Mai

THE ONE HEALTH APPROACH

“One Health is the collaborative effort of multiple health science professions, together with their related disciplines and institutions – working locally, nationally, and globally – to attain optimal health for people, domestic animals, wildlife, plants, and our environment.”¹ EpiHack Chiang Mai promotes this collaboration with input from human and animal health professionals. If we incorporate technology in this approach we hope to enable wider participation for disease surveillance, which will help decrease or eliminate disease outbreaks with a broader goal of avoiding global pandemics. EpiHack aims to develop a leading One Health platform in Chiang Mai.

¹[One Health Commission, WHO](#)

DIGITAL TOOLS IN PUBLIC HEALTH

Digital tools allow for a larger spectrum of participation from various social groups, including local hospital staff, students, farmers, parents and others, to report on human, animal and environmental health. By capturing health reports from individuals and groups, data can be generated to uncover valuable insights on the health status of societies. An example that illustrates the value of “big data” for public health is [Google Dengue Trends](#), which provides real-time data of Dengue activity in Thailand by aggregating Google search queries to estimate flu activity and help predict outbreaks.

PARTICIPATORY DISEASE SURVEILLANCE

Public participation in reporting human, animal and environmental health can provide even more accurate information and lead to earlier prevention and decreased disease outbreaks that affect our societies. This EpiHack is suitably located in Chiang Mai, a city characterised by its collective spirit and beautiful nature, with a quest to improve the health of all living beings in Chiang Mai. EpiHack welcomes leading software developers and animal and human health experts to jointly explore the possibilities of digital tools to create a safer and healthier province!

If you have not already seen our recommended videos, we suggest you take a look [before our gathering]. Watch them on YouTube:

[“Development of Health Information in Community Based on Geographical Information in Saraphi District, Chiang Mai Province, Thailand”](#)

Part I: <http://bit.ly/1dZSckX>

Part II: <http://bit.ly/1bpF63T>

Hack-a-thons; marathon hacking

WHAT IS A HACK-A-THON?

Hack-a-thons fuse the elements of hacking (in legal software development, of course) and marathon-like events (intensive, in a short period of time) to address specific issues. The hack-a-thon concept has spread like wildfire across the globe and its attractiveness is embedded in the intense, creative, fun and collaborative nature that gathers software developers, designers, interface designers and other technology experts with specialists on the issues identified.

WHAT IS A HACK-A-THON?

Hack-a-thons (also known as “hackfests”, “codefests” or “hack days”) have addressed a diverse set of issues and engaged a variety of participants. A few examples:

[Yale University’s “Health Innovation”](#) hack-a-thon has students and professionals hack for Global Health.

[TechCrunch’s “Disrupt”](#) hack-a-thons regularly take place in major cities throughout the world.

[“Education Hack”](#) unites teachers with developers.

[“Female Geek Flex”](#) are ladies-only hack-a-thons.

Regardless of theme or field most hack-a-thons aim to explore, build or improve usable software.

PREVIOUS EPIHACKS

EpiHack in Chiang Mai is the second EpiHack in Southeast Asia. In August 2013 software developers and designers worked together with global public health experts for four days in Phnom Penh, Cambodia to explore the opportunities to enhance or develop the technology for five regional health projects. The overall objective of EpiHack in Cambodia was to discover how five on-going health projects could be supported by technology. At EpiHack Chiang Mai we take a step further!

EPIHACK CHIANG MAI

EpiHack Chiang Mai is a hack-a-thon that gathers local experts in the fields of software development and human and animal health to be creative, innovative and adventurous together to develop a digital tool for animal, human and environmental disease detection. The carefully selected participants have the opportunity to develop skills, learn more about software development and public health, meet new exciting people, and contribute to a healthier Chiang Mai!

Check out more information, pictures and videos from the previous EpiHack:

[“Wrap Up From EpiHack” on the Skoll Global Threats Fund Blog](#)

Practical information

Please find all logistical information that you need to know in advance of your trip below.

Agenda and Preparation

Please find the attached agenda for the four-day hack-a-thon, which aims to create, adapt and fine-tune digital disease detection with a focus on human and animal health in Chiang Mai, Thailand

Date

The event will take place March 4th – 7th, 2014 in Chiang Mai, Thailand. All participants are requested to join throughout the whole hack-a-thon.

Venue

The venue for the hack-a-thon is at the Rarin Jinda Wellness Spa Hotel.

Address:

14 Charoenraj Road, T.Watkate

Chiang Mai 50000

Click [here](#) for map.

Accommodation

All delegates that do not reside in Chiang Mai will stay at the Rarin Jinda Wellness Spa Hotel.

Meals

Rarin Jinda Wellness Spa Hotel offers a very nice complimentary breakfast. All participants are invited for breakfast before the first morning session.

Breakfast, refreshments, lunch and dinner will be provided for the duration of EpiHack. Please note that dinner will not be provided on the final day, March 7th, 2014.

If you have any allergies or special food requirements please contact **Ms. Nathalie Sajda** (nathalie@opendream.co.th) in advance.

Dress code

Casual

Contact Info

For questions regarding schedule, location, accommodation, or any other concerns, contact **Shereen Adel** (pandemics@skollglobalthreats.org) or **Nathalie Sajda** (nathalie@opendream.co.th)

Agenda

Tuesday, March 4, 2014

Digital Disease Detection (DDD)

We kick off the EpiHack hack-a-thon by joining the Digital Disease Detection (DDD) symposium at the Language Center at Chiang Mai University ([map](#)).

The DDD event concept began in the US, and was brought to Bangkok and Phnom Penh November last year. DDD convenes innovators in technology, human and animal health professionals and educators to explore the ever-emerging convergence of Internet technology and information gathering to advance the discovery, tracking and treatment of infectious diseases. DDD offers fruitful insights through keynotes by local and international experts, including Dr. Mark Smolinski, Dr. Wilawan Senaratana, Dr. Veerasak Punyapornwittaya and others, and short presentations on local projects, presented by Dr. Raksiri Nomsiri, Dr. Wiriyarat Wiriyarat, Mr. Pisanurak Kanthawee amongst other distinguished speakers.

Registration starts at **8.00** and when you arrive at the DDD venue please register at the desk inform our staff that you are an EpiHack participant.

Please note that participation in DDD is mandatory as it is an important introduction to the One Health landscape in Thailand and will provide a better understanding for the coming days of hacking.

Tuesday, March 4, 2014

First day



Time	Agenda
8.00 - 12.00	Digital Disease Detection (DDD) Symposium at the Language Center, Chiang Mai University
12.00 - 13.00 Lunch	
13.00 - 13.30	Welcome to EpiHack // Hack-a-thon 1o1
13.30 - 14.30 Travel to Saraphi District for study visit	
14.30 -14.45	Welcoming address and presentation of Saraphi District Health System (DHS) and One Health <i>Dr. Jaras Singkaew, Director of Saraphi Hospital</i>
14.45 - 15.00	Saraphi Health Project; Why and How? <i>Assoc.Prof. Wilawan Senaratana, Saraphi Project Manager</i>
15.00 - 15.30	How the community has changed after receiving health data from the Saraphi Health Application <i>Mr. Boonjohn Santot, Director of Primary Care Unit, Donkeaw Sub-District</i>
15.30 - 16.00	Objective and Activities of the Thai Traditional Medicine and Alternative Care Centre <i>Ms. Wichada Panyatanakij, Manager/Professional Registered Nurse</i>
16.00 - 16.45	Group tour around the Centre to meet and discuss with Health Volunteers <i>Group 1 by Asst.Prof.Dr.Prapim Buddhirakkul</i> <i>Group 2 by Asst.Prof.Dr. Decha Tamdee</i>
16.45 - 17.30 Travel back to Chiang Mai and Rarin Jinda Wellness Spa Hotel	

Tuesday, March 4, 2014

cont. First day

Time	Agenda
17.45 - 18.50	Map-a-thon
18.50 - 19.00	Wrap up // Collaborative evaluation
19.00 - 20.00 Dinner	
20.00 - 22.00	Movie screening: Contagion (trailer) <i>Optional participation</i>

Wednesday, March 5, 2014

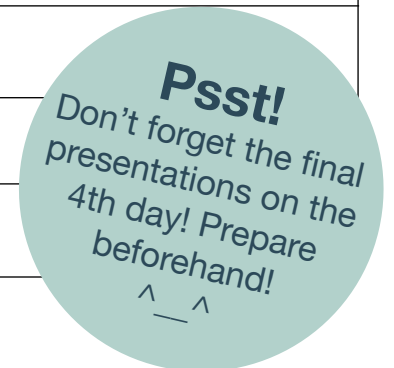
Second day

Time	Agenda
9.00 - 9.15	Hacker-energizer // Today's agenda
9.15 - 10.15	Deep-dive: One Health objectives <i>Assoc. Prof. Wilawan Senaratana, Saraphi Project Manager,</i> <i>Assoc. Prof. Dr. Lertrak Srikitjakarn, Faculty of Veterinary Science at Chiang Mai University</i> <i>Assoc. Prof. Dr. Ekkarat Boonchieng, Faculty of Computer Science at Chiang Mai University</i>
10.15 - 10.30	Hackers and health professionals brainstorm and start prototyping!
10.30 - 10.45 Coffee break	
10.45 - 12.00	Brainstorm and prototyping
12.00 - 13.00 Lunch	
13.00 - 17.50	cont. brainstorm and prototyping
17.50 - 18.00	Wrap up // Collaborative evaluation
18.00 - 19.00 Dinner	
19.00 - 19.40	Groups present for specially invited BarCamp guests
19.40 - 20.30	Skill-development session with BarCamp developers
20.30 -	BarCamp: mingle in the garden

Thursday, March 6, 2014

Third day

Time	Agenda
9.00 - 9.15	Hacker-energizer // Today's agenda
9.15 - 10.30	Prototyping in groups
10.30 - 10.45 Coffee break	
10.45 - 12.00	cont. prototyping in groups
12.00 - 13.00 Lunch	
13.00 - 17.30	cont. prototyping in groups
17.30 - 17.55	Group presentation for feedback
17.55 - 18.00	Wrap up // Collaborative evaluation
18.00 - 12.00 Dinner at Huan Soontaree (transportation with van)	
20.30 -	Night-hacking <i>Optional participation</i>



Friday, March 7, 2014

Final day

Time	Agenda
9.00 - 9.15	Hacker-energizer // Today's agenda
9.15 - 10.30	Final prototyping // Prepare final presentations
10.30 - 10.45 Coffee break	
10.45 - 12.30	cont. final prototyping // Prepare final presentations
12.30 - 13.45 Lunch reception with Open House guests	
13.45 - 13.55	Welcoming address to Open House guests <i>Mr. Patipat Susumpow</i>
13.55 - 14.55	Groups present final prototype
14.55 - 15.10	Glimpsing ahead <i>Dr. Mark Smolinski, Director of Global Health Threats at Skoll Global Threats Fund</i>
15.00 - 15.20	Wrap up // Group picture



Agenda



Skoll Global Threats Fund www.skollglobalthreats.org

Skoll Global Threats Fund's mission is to confront global threats imperiling humanity by seeking solutions, strengthening alliances and spurring actions needed to safeguard the future.

Founded by Jeff Skoll in 2009 to tackle the world's most pressing issues, its mandate is to drive large-scale global change in five main areas: climate change, pandemics, water security, nuclear proliferation and the Middle East Conflict. The global threats have the potential to kill or debilitate large numbers of people or cause significant economic or social dislocation or paralysis throughout the world. Skoll Global Threats Fund seeks to address these complex issues through the core practices of communication, governance, engagement, information and innovation.

Skoll Global Threats Fund works proactively to find, initiate, or co-create breakthrough ideas and/or activities that will have large-scale impact either directly or indirectly on crosscutting issues.



Chiang Mai University

www.cmu.ac.th

Chiang Mai University (CMU) is a public research university in northern Thailand founded in 1964 with an emphasis on engineering, science, agriculture and medicine. Its instructional mission includes undergraduate, graduate, professional and continuing education offered through resident instruction. CMU has four campuses, three of them in Chiang Mai and one in Lamphun Province. Chiang Mai University overall ranks in the nation are the 3rd (academic) and 5th (research) ranked by Thailand Office of the Higher Education Commission.

EpiHack and Digital Disease Detection (DDD) symposium has been supported through the Faculty of Nursing, Faculty of Veterinary Science and Faculty of Science at Chiang Mai University.



Opendream

www.opendream.co.th

Opendream is a Thai social enterprise on the quest to deliver information that shakes up the world!

Opendream, founded in 2008, is made up of a young and dynamic team of designers and developers with backgrounds varying from user experience design to software development and web and mobile application development. Opendream's mission is reinforced each day by the values of each staff member and our dedication to social impact, which has brought us a diverse set of clients.

Opendream specialises in information technology systems, design and design conversion, and programming, and applies to products both on the web and on mobile devices. As a leading technologist in Southeast Asia, Opendream undertakes projects that stimulate societal and economic impact and engage in the development of free software and open standards. We work closely with networks such as Creative Commons and other open sourced based 'unconferences', including BAR Camp, ReadCamp, LibCamp, CC Salon and the Open Data Initiative. Opendream advocates for greater transparency and accessible open data for the public, which we have promoted through partnerships with the Mozilla Foundation.

Additional

SOCIAL MEDIA

Sharing is caring!

Share your experiences during Epihack by using the hashtag **#epihack**

Please actively post pictures, comments, ideas, quotes (anything that inspires you!) from EpiHack as we will create a collaborative 'timeline' from the EpiHack hack-a-thon!

Like the hack-a-thon at facebook.com/epihack