

## Sunday 27<sup>th</sup> August 2023

Time		Activity (and presenter details)
Start	Finish	
14.00		Participants board arranged transportation from Bangkok
17.00		Participants arrive at VISTEC; check-in at either the Encony Hotel or VISTEC Faculty Center
18.30	20.00	Dinner at VISTEC

## Monday 28<sup>th</sup> August 2023

Time		Activity (and presenter details)	Location
Start	Finish		
7.30	9.00	<ul style="list-style-type: none"> <li>- Breakfast at Clubhouse and registration at V building community space (for Faculty Center residents)</li> <li>- Breakfast at Encony Hotel and registration at VISTEC auditorium (for Encony Hotel residents)</li> </ul>	VISTEC Clubhouse; V building community space; VISTEC auditorium
9.00	9.20	Welcome message and opening of the workshop by the Protein Society of Thailand	VISTEC auditorium
9.20	9.45	Lecture: <i>molecular principles of CRISPR-based diagnostics</i> Speakers: Danaya Pakotiprapha (Mahidol); Chayasith Uttamapinant (VISTEC)	VISTEC auditorium
9.45	11.15	Short talks and Discussion panel: <i>use cases of CRISPR-based diagnostics in LMICS</i> Panelists: <ul style="list-style-type: none"> <li>- Navin Horthongkham (Siriraj): TBA</li> <li>- Sunchai Prayungporn (Chulalongkorn): <b>COVID-19 SCAN: CRISPR-based diagnostic kit for SARS-CoV-2</b></li> <li>- Phoom Chairatana (Siriraj): TBA</li> <li>- Claire Chewapreecha (MORU): <b>Benchmarking CRISPR-BP34 for point-of-care melioidosis detection in Northeast Thailand</b></li> <li>- Thawatchai Chaijaraspong (Mahidol): <b>CRISPR detection for diseases in aquaculture</b></li> </ul> Moderator: Danaya Pakotiprapha	VISTEC auditorium
11.15	13.00	Lunch	VISTEC Clubhouse
13.00	15.30	Lab 1: <i>practical session in designing CRISPR-based tests and test components</i> Speakers: Pornchai Kaewspasak (Chulalongkorn) and Thanyapat Wanitchanon (VISTEC)	BSE102
15.30	16.15	Coffee break	BSE
16.15	16.45	Lecture: <i>device designs and fabrication for point-of-care CRISPR tests</i> Speakers: <ul style="list-style-type: none"> <li>- Pornpat Athamanolap (Mahidol): <b>Advances in magnetofluidics for point-of-care molecular diagnosis</b></li> </ul>	VISTEC auditorium
16.50	17.20	Online lecture: <b>Open science initiatives by eLife</b> Speaker: Ailís O'Carroll (eLife)	VISTEC auditorium
17.20	18.20	<ul style="list-style-type: none"> <li>- VISTEC campus tour</li> <li>- Visit to V community space for sponsor/company presentations</li> </ul>	V building community space
18.30	20.30	Dinner + social activity	VISTEC Clubhouse

## Tuesday 29<sup>th</sup> August 2023

Time		Activity (and presenter details)	Location
Start	Finish		
7.15	8.30	- Breakfast at Clubhouse (for Faculty Center residents) - Breakfast at Encony Hotel (for Encony Hotel residents)	VISTEC Clubhouse; Encony Hotel
8.30	9.30	Online lecture: <b>Programmable molecular technologies for genome editing and diagnostics</b> Speakers: Omar Abudayyeh and Jonathan Gootenberg (McGovern Institute for Brain Research at MIT, USA)	VISTEC auditorium
9.30	10.00	Lecture: <b>Biochemistry and production of recombinase-polymerase amplification (RPA)</b> Speaker: Aimorn Homchan (VISTEC)	VISTEC auditorium
10.00	11.00	Lectures: <i>Biochemistry and production of Cas enzymes and crRNAs</i> Speakers: - Somsakul Wongpalee (Chiangmai): <b>Laboratory-scale crRNA production: biochemistry and practice</b> - Ruchanok Tinikul (Mahidol): <b>Production of Cas13 enzyme and its stability test</b>	VISTEC auditorium
11.00	12.30	Lunch	VISTEC Clubhouse
12.30	14.30	Lab 2: practical session in preparing and using CRISPR-based tests Speakers: VISTEC and Mahidol teams	BSE102
14.30	15.00	Coffee break	BSE
15.00	16.00	Online lecture: <b>The importance of increasing R&amp;D and local production capability of diagnostics in LMICs</b> Speaker: Marta Fernandez Suarez (FIND-Dx) or a representative from FIND	VISTEC auditorium
16.00	17.00	Online lecture: <b>Open-source toolkits and communities for global diagnostics research</b> Speaker: Jenny Molloy (Cambridge)	VISTEC auditorium
17.00	17.20	Closing remarks by the Protein Society of Thailand	VISTEC auditorium
18.00		Participants board arranged transportation to travel back to Bangkok	