

**CONFERENCE BOOK**

**2<sup>nd</sup> SKIC-MHS**  
Syiah Kuala International Conference  
on Medicine and Health Sciences



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## WELCOME REMARK BY THE PRESIDENT OF SYIAH KUALA UNIVERSITY



Dear participants of the 2<sup>nd</sup> Syiah Kuala International Conference on Medicine and Health Sciences 2018,

Welcome to Banda Aceh! As the president of Syiah Kuala University, I am so happy to have you all in Aceh. I hope you will use the opportunity of joining this conference to share knowledge and experiences as well as make new friends. I also wish that you will enjoy the beauty and unique of Banda Aceh during your stay here.

Syiah Kuala University is trying to be a leading higher education institution in Indonesia. Every year, we try improving our capacity and quality, in both infrastructures and human resources, one of which is by conducting an international conference like this. We believe that it will broaden our views, enhance our knowledge, and expand our network. Thus, I would like to thank the committee and the Faculty of Medicine for their hard work in arranging this conference. May you all have an unforgettable experience in Aceh and see you at the 3<sup>rd</sup> SKIC-MHS in Aceh next year.

Regards,

**Prof. Samsul Rizal, M.Eng., Ph.D**  
President of Syiah Kuala University



## WELCOME MESSAGE FROM THE DEAN



It is an honor and privilege for me to welcome you to the 2nd Syiah Kuala International Conference on Medical and Health Sciences (SKIC-MHS) 2018. I am also delighted to welcome all the distinguished speakers that have traveled from all regions of the world to be present at this important meeting. I thank the experts for accepting our invitation to share expertise and latest research results.

We hope that participants would take this opportunity to expand their network and establish collaborative ties with speakers and participants coming from other countries.

We would like to thank all of our generous sponsors and everyone who has made this conference such a success. Without their generous support and excellent arrangements, this conference would not have been possible. The efforts of the organizing committee are to be appreciated, in their cooperative spirit and extraordinary efforts endeavor to conduct the conference in a befitting manner.

On behalf of the Faculty of Medicine, Syiah Kuala University, we sincerely hope you will enjoy the conference and your stay in Banda Aceh. We thank all of you for choosing to attend this conference and truly make it the experience we are hoping it will be.

Sincerely,

**Prof. Maimun Syukri, MD, Ph.D**

Dean of Faculty of Medicine, Syiah Kuala University

## WELCOME MESSAGE FROM THE CONFERENCE CHAIR



On behalf of the SKIC-MHS 2018 organizing committee, I am honored and delighted to welcome all the participants to the 2nd Syiah Kuala International Conference on Medical and Health Sciences (SKIC-MHS) 2018.

The theme of this year's conference, "Tropical Medicine and Non-Communicable Diseases: from Basic to Clinical Practice." The conference provides an opportunity for knowledge and experience exchange and invites clinical experts, public health practitioners, medical scientists and researchers, decision makers and stakeholders from all part of society and all regions of the world. I hope it will be a forum for the participants to share their idea, concepts, best practices, and critical analysis with their international peers.

Beyond the symposium and technical presentations, this conference is also enriched by several activities including pre-conference workshop, lunch symposium and meet the expert session. We were fortunate to have seven well-known invited speakers come from Indonesia, Australia, Taiwan, Malaysia, and Germany to present the exciting topic from their field. In addition to speakers and presentations, over 93 technical papers in the conference split between 32 oral presentations and 61 e-poster presentations.

All selected papers (oral or poster) in the 2nd SKIC-MHS 2018 will be published in the SCITEPRESS Proceeding or Indonesian Biomedical Journal (both indexed by SCOPUS). We also prepare a proceeding with ISSN to publish the non-selected articles.

As a conference chair of the SKIC-MHS 2018, I know that the success of the conference depends ultimately on the many people who have worked with us in planning and organizing both the technical program and supporting social arrangements. Recognition should go to the all organizing committee members who have all worked extremely hard for the details of essential aspects of the conference programs.

Finally, to all participants, I hope you enjoy the conference as much as I have enjoyed being part of organizing it.

Sincerely,

**Assoc Prof. Kurnia Fitri Jamil, MD, Ph.D**

Chair of the 2nd SKIC-MHS 2018



### CONFERENCE TIMETABLE

The 2<sup>nd</sup> Syiah Kuala International Conference on Medicine and Health Science  
(the 2<sup>nd</sup> SKIC-MHS)  
"TROPICAL MEDICINE AND NON-COMMUNICABLE DISEASES: FROM BASIC TO  
CLINICAL PRACTICE"  
Hermes Palace Hotel, Banda Aceh, Indonesia  
September 7<sup>th</sup> – 8<sup>th</sup>, 2018

Time	Agenda	
	Aceh 1	Aceh 2
<b>Day 1 (Friday, 7<sup>th</sup> September 2018)</b>		
07.30-08.00	<b>Registration</b>	
08.00-09.00	Oral Presentation 1a (5 papers, @ 10 mins)	Oral Presentation 1b (5 papers, @ 10 mins)
	e-Poster Presentation 1a (10 e-posters, @ 5 mins) presented at Madinah Room	e-Poster Presentation 1b (10 e-posters, @ 5 mins) presented at Madinah Room
09.15-10.00	<b>Opening Ceremony</b>	
09.15-09.20	Welcome remark by MC	
09.20-09.25	Recitation of Al-Qur'an (by Medical student) followed by Du'a	
09.25-09.30	Opening remark by the Chair of the 2 <sup>nd</sup> SKIC-MHS 2017	
09.30-09.35	Opening remark by the Rector of Syiah Kuala University	
09.35-09.45	Aceh Traditional Dance: Rapa'i	
09.45-09.50	MoU Signing by Faculty of Medicine SKU and UKM	
09.50-09.55	Group Picture	
09.55-10.00	Closing remark by MC	
10.00-10.15	<b>Coffee Break</b>	
10.15-10.45	<b>Keynote Speech</b>	
	Prof. Maimun Syukri (Syiah Kuala University, Indonesia): Lifestyle Modification as a Premordial Prevention of Chronic Kidney Disease	
10.45-11.45	<b>Lunch Symposium 1</b>	
	Topik 1: Prof. David Sontani Perdanakusuma (Airlangga University, Indonesia): Wound Management	
	Topik 2: Jailani, MD (Syiah Kuala University, Indonesia): the Role of AHA in Burn Wound Healing	
11.45-14.00	<b>Friday Pray and Lunch Break</b>	

14.00-15.00	Oral Presentation 2a (6 papers, @ 10 mins)	Oral Presentation 2b (6 papers, @ 10 mins)
	e-Poster Presentation 2a (10 e-posters, @ 5 mins) presented at Madinah Room	e-Poster Presentation 2b (10 e-posters, @ 5 mins) presented at Madinah Room
<b>THE END OF 1<sup>ST</sup> DAY</b>		
<b>Day 2 (Saturday, 8<sup>th</sup> September 2018)</b>		
07.30-08.00	<b>Registration</b>	
08.00-09.00	Oral Presentation 3a (5 papers, @10 mins)	Oral Presentation 3b (5 papers, @10 mins)
	e-Poster Presentation 3a (10 e-posters, @ 5 mins) presented at Madinah Room	e-Poster Presentation 3b (10 e-posters, @ 5 mins) presented at Madinah Room
09.15-09.45	<b>Meet the Expert:</b>	
	Prof. Zaleha Abdullah Mahdy (University Kebangsaan Malaysia): Target BP Control in Hypertension in Pregnancy	
09.45-10.00	<b>Coffee Break</b>	
10.00-11.00	<b>Sympo II:</b>	
	1. Dar Der Ji, PhD (National Yang-Ming University, Taiwan): Lymphatic Filariasis: Approach of Disease Elimination	
	2. Dr. rer. Nat. Marc Huebner (University of Bonn, Germany): Identification of New Treatments for Human Filarial Infections	
11.00-12.00	<b>Sympo III:</b>	
	1. Allison Imrie, PhD (University of Western Australia, Australia): Dengue and Zika Infection in Southeast Asian Region	
	2. Fong Mun Yik, PhD (University of Malaya, Malaysia): High genetic diversity of the zoonotic malaria parasite <i>Plasmodium knowlesi</i> : a threat to effective malaria elimination in Southeast Asia?	
12.00-12.25	<b>Lunch Symposium 2</b>	
	Prof. Maimun Syukri (Syiah Kuala University, Indonesia): The Role of High-dose N-Acetyl Sistein in Reducing Creatinin Level on Acute Kidney Injury	
12.25-14.00	<b>Dhuhur Pray and Lunch Break</b>	
14.00-14.40	<b>CLOSING CEREMONY</b>	
14.00-14.30	Announcement of best speakers 3 Best Oral Presenters 3 Best E-Posters Presenters	



14.30-14.35	Closing remark by the Dean of Faculty of Medicine, Syiah Kuala University (Prof.Maimun Sykri)
14.35-14.40	Group Picture
	<b>THE END OF SYMPOSIUM</b>



## Kinetic Parameter Analysis of Myeloperoxidase in The Presence of Some Co-Substrates in Saliva Of New Born at Risk of Sepsis

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**Abstract:** During infection like sepsis, myeloperoxidase (MPO) enzyme will be generated from the neutrophil. This enzyme will catalyse the oxidation of halide or pseudo-halide (Cl<sup>-</sup>, I<sup>-</sup>, SCN<sup>-</sup>, Br<sup>-</sup>) by using hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>). However, the mechanism by which oxidation of these several co-substrates in neonatal sepsis is unknown. Here, we have compared the kinetic parameter of MPO in saliva of new-born at risk of sepsis with or without the presence of these several co-substrates. In this experiment, saliva samples were taken from new-born in health (n=20) and risk of sepsis (n=20). Saliva samples from each group then homogenized and divided into four groups. Group 1 served as control which contains saliva+H<sub>2</sub>O<sub>2</sub>; group 2 which contains saliva+H<sub>2</sub>O<sub>2</sub>+Cl<sup>-</sup>; group 3 which contains saliva+H<sub>2</sub>O<sub>2</sub>+I<sup>-</sup>; and group 4 which contains saliva+H<sub>2</sub>O<sub>2</sub>+SCN<sup>-</sup>. After 1-hour incubation, the kinetic parameters (K<sub>m</sub> and V<sub>max</sub>) were analysed. The result shows that in sepsis condition, compared without the presence of some co-substrates, it seems the addition of some co-substrate will increase the affinity between MPO, H<sub>2</sub>O<sub>2</sub>, and the co-substrate. Between these three co-substrates, it seems in sepsis condition MPO will oxidize Cl<sup>-</sup>. In conclusion, in sepsis condition MPO works by a common mechanism, i.e., oxidizing Cl<sup>-</sup> to HOCl than another co-substrate.

**Keywords:** Myeloperoxidase, Neonatal Sepsis, Saliva