STUDY PROPOSAL REQUEST FORM

Please complete the form and email to PAROS secretariat at patricia.tay@scri.edu.sg by the stipulated date. You will be notified in due time on whether your study has been accepted for presentation.

Reminder: Please check the list of existing proposals and publications from https://www.scri.edu.sg/crn/pan-asian-resuscitation-outcomes-study-paros-clinical-research-network-crn/paros-publications/ to avoid duplications of proposals. Abstract and manuscript must be sent to PAROS chairs for approval before submission for presentation/publication.

1. BASIC INFORMATION

<table>
<thead>
<tr>
<th>Name: Andrew Ho</th>
<th>Designation: Resident</th>
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<td>Country: Singapore</td>
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2. TYPE OF REQUEST (Please select one)

- [ ] New Study Proposal (initial)
- [ ] Secondary Analyses
- [ ] Explanatory Analyses

3. STUDY TITLE

Environmental exposure as a risk factor for out-of-hospital cardiac arrest

4. ABSTRACT OF STUDY PROPOSAL

In no more than 350 words, describe the study under the given headings below.

Objectives/Hypotheses

Environmental exposure as a risk factor for out-of-hospital cardiac arrest

Methodology (To include sample size, settings, inclusion & exclusion criteria, etc. For secondary & explanatory analyses: include statistical plan, type of analyses, measurement, etc.)

Statistical methods include time series models, time-stratified case-crossover models, geospatial analyses using Bayesian spatiotemporal models on geo-referenced data and hotspot analysis. The primary outcome is the occurrence of an OHCA event.

Exposure data: We propose to utilize high quality environmental data in the public domain already collected and monitored by various agencies.

Disease data: We propose to utilize OHCA incidence data from the PAROS network. Sites would be included if there is reliable environmental data available for that region, which can be directed measured or extrapolated via modelling. Besides incident count for each date of occurrence, additional variables include demographic data to allow for subgroup analyses to identify susceptible subpopulations.

Significance of the study (e.g. provide brief description on how the study can improve current

Millions of people worldwide are exposed to seasonal high levels of air pollution from forest fires,
which is a modifiable risk factor, making it a formidable public health concern. Studies are divided on the association of air pollution with OHCA. Our pilot studies in Singapore showed that each 100 unit increment in Pollutant Standards Index on the same day and one to five days prior was significantly associated with increased risk of out-of-hospital cardiac arrest by 30-56%. Findings from this proposed study would contribute to a body of evidence on the general and specific health hazards of exposure to air pollutants, which as a whole, presents a compelling argument for concerted national efforts and intensified international cooperation to develop sustainable programs to tackle the haze problem. Further, the data aids in the formulation of health policy to mitigate health effects from exposure to air pollution at various levels. Interventions in this area include health advisories from the government agencies, city planning and building design from the urban development perspective, emergency medical resources deployment, public face-mask distribution programs, school closure policies, as well as training policies for military institutes.

**GUIDELINES FOR PREPARING NEW PROPOSAL PRESENTATION**

If your study proposal has been accepted for presentation, you will be notified by the Secretariat. Please prepare your presentation slides in accordance to the following instructions. Each presenter is given 10 minutes to present (8min presentation + 2min Q&A).

**General Instructions**

1. Presentation must include the following sections:
   a. Introduction
   b. Objectives/Hypotheses
   c. Methodology
   d. Significance

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Secretariat
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2. Limit total number of slides to not more than 12. The following are the recommended number of slides for each section.
   a. Introduction – maximum of 2 slides
   b. Objectives/Hypotheses – maximum of 2 slides
   c. Methodology – maximum of 6 slides
   d. Significance – maximum of 2 slides

3. Try to use big fonts and contrasting colours to increase readability e.g.
   a. Black/dark blue font against white background
   b. White/yellow font against black background
   c. Black font against blue background

For any enquiries, please contact PAROS secretariat at paros.secretariat@yahoo.com