

TRANSFORMING TOXICOLOGY LANDSCAPE FOR SAFER AND SUSTAINABLE TOMORROW

INVITED SPEAKERS



Associate Professor Angela Chiew is a Clinical

Toxicologist and Emergency Medicine Physician at Prince of Wales Hospital, Randwick and as a Clinical Toxicologist for the NSW Poison's Information Centre. She has completed her PhD in Paracetamol Poisoning in 2020 through Sydney University. She performs research into paracetamol poisoning and her major contribution has been the establishment of the Australian Toxicology Monitoring (ATOM) Study. She is on the editorial boards of Emergency Medicine Australasia, British Journal of Clinal Pharmacology and Clinical Toxicology. She is the chair of the International Clinical Toxicology Recommendations Collaborative and the lead for the paracetamol poisoning group. Angela is the Lead Clinical Toxicologist overseeing and managing the NSW Poisons Information Centre Research Portfolio and the director of emergency medicine research at Prince of Wales Hospital.

1. Harnessing AI in Medicine: Opportunities and

Challenges

In recent years, artificial intelligence (AI) has made notable strides in transforming medicine, offering both groundbreaking opportunities and significant challenges. In this session we will cover the use of AI from bedside (clinical uses) to research applications.

The first talk by Associate Professor Angela Chiew "AI in Research: The Good, The Bad, The Automated," will explore the impact of AI tools, including ChatGPT and other advanced systems, on various facets of medical research, particularly in the context of grant writing and manuscript preparation. In this session we will discuss how to best use AI in manuscript writing and how it can save you time. This session will also cover the pitfalls and limitations of AI in research. It shouldn't be used to create original scientific content as it can produce errors or inaccuracies. For instance, ChatGPT generates responses based on existing information, which may not always be up-to-date or contextually appropriate.

Additionally, this session will feature a discussion on HEIDI (medical scribe) by Mr Harry Nguyen, a specialized medical scribe AI developed to assist in documenting patient interactions and writing clinical notes. We will explore HEIDI's development, its integration into clinical workflows, and the IT safety measures in place to ensure data protection. The talk will also address the advantages of using HEIDI, such as enhanced documentation efficiency and reduced administrative burden, alongside the challenges, including accuracy concerns and the need for ongoing supervision. The session will conclude with a live demonstration of HEIDI, showcasing its capabilities and practical applications in a medical setting – toxicology consults and at the bedside.

2. Optimising Paracetamol Overdose Management: Global Perspectives and Innovations

This symposium on paracetamol (acetaminophen) overdose management aims to explore the multifaceted aspects of treating paracetamol poisoning worldwide. With a global expert panel, the symposium will delve into the assessment and management of paracetamol poisoning, highlighting significant regional variations in approaches.

The symposium will begin by examining specific regional practices in paracetamol overdose management, focusing on Sri Lanka as a case study to illustrate key differences in protocols and clinical outcomes across diverse healthcare settings. This comparative analysis will provide valuable insights into the impact of regional healthcare infrastructures on patient care.

This symposium will also discuss which patients may require more antidote (acetylcysteine). Examining the scenarios and evidence supporting escalated administration of acetylcysteine and the different acetylcysteine regimens used.



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Lastly advancements in biomarkers and novel antidotes will also be a focal point. With a discussion of potential emerging liver biomarkers and their utility in paracetamol poisoning. Followed by a review of the research for novel antidotes.

The symposium will culminate in a panel and audience discussion featuring compelling case studies of paracetamol overdose from diverse geographical contexts. Participants will analyse and debate the varying approaches to management, and how infrastructural differences, and healthcare system disparities, that influence clinical decision-making worldwide. This symposium promises to provide a thorough exploration of global perspectives and innovations in paracetamol overdose management.

3. Toxic case discussions from Australasia

Like many parts of Asia, Australasia presents a number of challenges to the poisoning/toxicology community whether that be the unusual toxinology, emerging patterns of substance use or complex pharmaceutical poisonings. The relatively isolated locations of some facilities can further compound these challenges.

During this session, a group of five expert clinical toxicologists, all currently active in clinical practice, will present and discuss poisoning challenging poisoning cases on behalf of TAPNA Inc. www.tapna.org. au, the representative body for the Australasian toxicology community. Cases will be presented by a facilitator with expert commentary/input from the panel with opportunities for audience participation also.

We look forward to some interesting case discussions at the congress and the opportunity to engage with our friends from Asia and other parts of the worldwide toxicology community.