

LEE KONG CHIAN
SCHOOL OF
MEDICINE



Imperial College
London

The Academic Respiratory Initiative for Pulmonary Health (TARIPH) Chronic Obstructive Pulmonary Disease (COPD) Symposium

4 December 2019, Wednesday
1.30pm - 6.00pm
Seminar Room, Level 2
Lee Kong Chian School of Medicine
Headquarters Building
11 Mandalay Road, Singapore 308232










The Academic Respiratory Initiative for Pulmonary Health (TARIPH) is a national research platform that addresses respiratory health and disease in Singapore. It brings together interdisciplinary teams that share common interests, and acts as a platform for the exchange of ideas and development of sustainable relationships. It aims to align strategic academic expertise across Singapore in a formal way to benefit Singaporeans suffering with lung disease through research.

TARIPH members will be able to benefit from:

1. Research collaboration workshops,
2. Assistance with potential collaboration across Singapore,
3. Facilitation of interdisciplinary initiatives,
4. Networking events, and
5. National and International symposia.

Please join us at <http://tiny.cc/JoinTARIPH> to be kept in the loop for future TARIPH events. Membership is free. We welcome all who are interested in academic respiratory research to join the TARIPH family.

Please visit <http://www.lkcmedicine.ntu.edu.sg/Research/TARIPH/Pages/Home.aspx> for more information.

TARIPH COPD symposium - Programme			
Time	Item	Speaker	Institution
13:30 – 14:30	Networking Lunch & Registration		
14:30 – 14:40	Welcome Address	Professor James Best, Dean, Lee Kong Chian School of Medicine	 LEE KONG CHIAN SCHOOL OF MEDICINE
14:40 – 14:50	Opening Speech	Associate Professor Augustine Tee, Deputy Chairman, Medical Board (Medical Disciplines); Chief, Medicine, Senior Consultant, Department of Respiratory & Critical Care Medicine	 Changi General Hospital SingHealth
Session 1 – Co-chaired by Adj Asst Prof Jessica Tan Han Ying (SKH) and A/Prof Albert Lim (TTSH)			
14:50 – 15:10	“High-risk” COPD phenotype in Asia	Dr Tiew Pei Yee, Associate Consultant, Department of Respiratory and Critical Care Medicine/ PhD candidate, LKCMedicine Chotirmall Lab	 Singapore General Hospital SingHealth LEE KONG CHIAN SCHOOL OF MEDICINE
15:10 – 15:30	Depression, Cognitive impairment and frailty in COPD: SLAS research findings	Associate Professor Ng Tze Pin, Department of Psychological Medicine, Yong Loo Lin School of Medicine	 NUS National University of Singapore
15:30 – 15:50	COPD Care Paths – The Road Best Taken?	Dr Xu Huiying, Consultant, Department of Respiratory & Critical Care Medicine	 Tan Tock Seng HOSPITAL
15:50 – 16:10	COPD Integrated Care in Singapore	Associate Professor Noel Tay, Director & Senior Consultant, Respiratory Medicine; Senior Consultant, Internal Medicine & Intensive Care Medicine	 Ng Teng Fong General Hospital NUHS National University Health System
16:10 – 16:25	Q&A		
16:25 – 16:45	Tea Break		
Session 2 – Co-chaired by Assistant Prof Tan Tze Lee (College of Family Physician) and Associate Professor Augustine Tee (CGH)			
16:45 – 17:05	Predicting the risk of adverse outcomes in COPD: from classical epidemiology to big data	Dr Anthony Yii, Associate Consultant, Department of Respiratory & Critical Care Medicine	 Changi General Hospital SingHealth
17:05 – 17:25	Challenges in managing COPD in primary care	Dr Jason Chan Family Physician & Deputy Clinic Head, NHG Polyclinic-Geylang	 National Healthcare Group POLYCLINICS
17:25 – 17:45	Can we prevent COPD with early intervention?	Professor Wisia Wedzicha, Clinical Chair in Respiratory Medicine, Head, Respiratory Division; Professor of Respiratory Medicine, Faculty of Medicine, National Heart & Lung Institute; LKCMedicine Visiting Professor	 Imperial College London LEE KONG CHIAN SCHOOL OF MEDICINE
17:45 – 18:00	Q&A		
18:00	End of Workshop		



Dr TIEW Pei Yee

Consultant, Department of Respiratory and Critical Care Medicine, Singapore General Hospital

PhD candidate, Chotirmall Lab, Lee Kong Chian School of Medicine

About the Speaker

Dr Tiew is a Consultant at Singapore General Hospital, Respiratory Department. She obtained her medical degree from the University of Melbourne. She completed her Respiratory training under SingHealth residency and won the book prize in Respiratory Medicine. Currently, Dr Tiew is leading the Chronic Obstructive Pulmonary Disease (COPD) clinic at Singapore General Hospital. She is also pursuing her PhD at Lee Kong Chian School of Medicine, focusing on Asian Chronic Obstructive Pulmonary Disease phenotype.

“High-risk” COPD phenotype in Asia

COPD is a heterogeneous disease with high inter-individual variability. In Asia, the variability in culture, environment, healthcare resources, and risk factor exposure result in a distinct Asian COPD phenotype. Understanding the phenotype of COPD in Asian patients will be the key step towards personalisation of COPD management.



Associate Professor NG Tze Pin

Associate Professor, Fellow and Research Director at the Department of Psychological Medicine, Yong Loo Lin School of Medicine, National University of Singapore

Adjunct Principal Investigator at the Geriatric Education and Research Institute, Ministry of Health

Visiting consultant at Khoo Teck Puat Hospital

About the Speaker

Ng Tze Pin (MD) is a physician-epidemiologist and public health medicine specialist. He is the Principal Investigator of the Singapore Longitudinal Ageing Studies (SLAS), a population-based cohort follow-up study of 6,000 older Singaporeans, which focuses on the themes of dementia, depression, frailty and successful ageing. He has published over 350 research papers in peer-reviewed journals. He is a member of the expert panel of the Global Council on Brain Health of the American Association of Retired Persons (AARP), Ministry of Health Science of Ageing Policy Advisory Committee, and the Editorial Boards of Dementia and Geriatric Cognitive Disorders, Journal of Alzheimer's Disease, Postgraduate Medicine, Current Geriatrics Reports, Advances in Geriatric Medicine and Research.

Depression, Cognitive impairment and frailty in COPD: SLAS research findings

Depression, cognitive impairment and physical frailty are common functional co-morbidities in COPD. Their relevance and impact on COPD outcomes in Singapore have been investigated in hospital-based and population-based studies in recent years. SLAS estimates of population prevalence of depression was twice higher in COPD compared to non-COPD. The correlates and risk factors of depression and COPD shared common psychosocial factors such as socioeconomic deprivation and social isolation, but include increased airflow obstruction, dyspnoea and physical health and functional impairment. Chronic inflammation measured by elevated IL6 and CRP was associated with both depression and low pulmonary function. Increased depressive symptomatology is associated with more stress-life events and exaggerated in COPD patients. In hospital studies of COPD patients followed up for one year, depression was present in 44% of COPD patients, and associated with increased length of stay, higher mortality rate, poorer quality of life, and lower likelihood of smoking cessation. Unfortunately, psychological intervention did not show significant reduction of depression or anxiety in a recently completed randomised controlled trial. Severe COPD was associated with cognitive impairment. FEV1% is positively associated with Mini-Mental State Examination (MMSE), executive function, and inversely associated with prevalence of cognitive Instrumental Activities of Daily Living (IADLs) disability. COPD was associated with greater prevalence of physical frailty. Increasing levels of COPD severity measured by FEV1 is associated with significantly higher frailty index and physical phenotype measures of frailty. Further studies are needed to better understand the combined impacts of depression, cognitive impairment and frailty, and evaluate interventional measures to improve COPD outcomes.



Dr XU Huiying

*Consultant, Department of Respiratory & Critical Care Medicine,
Tan Tock Seng Hospital*

About the Speaker

Dr Xu Huiying is a consultant respiratory physician in Tan Tock Seng Hospital, Singapore. She received her fellowship training in advanced chronic obstructive pulmonary disease (COPD) in the Royal Brompton Hospital, London. During her training in the UK, she was also appointed as a research fellow in the National Heart and Lung Institute, Imperial College London. Apart from her clinical interests in COPD, Dr Xu is also active in medical education and is a core faculty member of the NHG Respiratory Medicine residency programme as well as a clinical lecturer in both Lee Kong Chian School of Medicine and Yong Loo Lin School of Medicine.

COPD Care Paths – The Road Best Taken?

Chronic obstructive pulmonary disease (COPD) is a debilitating lung disease affecting 8-26% of adults above 40 years old in Singapore. A diagnosis of COPD results in disproportionately more physician visits, emergency department visits and hospitalisations than any other diagnosis.

Care packages, also known as care paths or bundles, are bundled sets of evidence-based clinical interventions, and have been developed to improve care processes to the highest level of reliability with the aim of improvement in outcomes. However, the evidence regarding the effectiveness and utility of care packages has been inconsistent.

This talk aims to explore some of the controversies surrounding COPD care packages as well as to share the experience with COPD care paths in Tan Tock Seng Hospital.



Adjunct Assistant Professor Noel TAY

*Director & Senior Consultant, Respiratory Medicine,
Ng Teng Fong General Hospital*

*Senior Consultant, Internal Medicine & Intensive Care Medicine, National
University Hospital*

About the Speaker

Dr Noel Tay is the Director of Respiratory Medicine in JurongHealth Campus. He practises as a Senior Consultant in Ng Teng Fong General Hospital in Respiratory Medicine, Internal Medicine and Intensive Care Medicine.

Dr Tay graduated from the Faculty of Medicine, National University of Singapore, in 1991. He obtained his membership of the Royal Colleges of Physicians (UK) in 2002 and fellowship of the Royal College of Physician in 2016. In 2005, he completed advanced training in Respiratory and Critical Care Medicine. He did his fellowship in Cardiopulmonary Exercise Test and Pulmonary Rehabilitation at the University Health Network in the University of Toronto. Apart from his clinical work, Dr Tay has a keen interest in teaching.

COPD Integrated Care in Singapore

COPD is a common respiratory condition that is chronic and debilitating. It puts a heavy burden on healthcare resources especially in terms of inpatient admissions and readmissions. Integrated Care is recognised as key to the optimisation of care of COPD patients. JurongHealth set out to put in place a COPD Integrated Care programme with an emphasis on case management and clinical integration. The programme demonstrated that high-touch case management and multidisciplinary care were effective in reducing 30 days readmissions and improving quality of life.



Dr Anthony Yii

Consultant, Department of Respiratory & Critical Care Medicine, Changi General Hospital

About the Speaker

Dr Anthony Yii is currently a Consultant in the department of Respiratory and Critical Care Medicine, Changi General Hospital. He earned his medical degree from the University of Cambridge, completed his residency in Internal Medicine with SingHealth, and subsequently obtained his specialist accreditation in Respiratory Medicine in 2017. His research interests are in Airway Diseases and Allergy, in particular pheno-endotyping and risk stratification. He was given the SingHealth Publish! Award this year in recognition of his research efforts in airway diseases. He is a scientific member of the SingHealth Centralised Institutional Review Board, and also undertakes research mentorships with numerous medical students, residents and senior residents in his role as departmental Research Lead, some of whom have gone on to win awards for their research studies.

Predicting the Risk of Adverse Outcomes in COPD: from Classical Epidemiology to Big Data

COPD patients who are at high risk of future adverse outcomes, such as hospitalisation or death, need to be identified so that interventions can be taken to mitigate the occurrence of those adverse outcomes. This presentation will highlight the findings of a collaborative study between several local restructured hospitals to predict the risk of hospitalised COPD exacerbations, and discuss possible approaches to translating these predictions into meaningful clinical action. This presentation will also report nascent efforts to leverage on healthcare “big data” to conduct COPD quality improvement and disease surveillance studies.



Dr Jason CHAN

Family Physician & Deputy Clinic Head, NHG Polyclinic-Geylang

About the Speaker

Dr Jason Chan is a Family Physician currently serving in NHGP-Geylang Polyclinics. As a Deputy Advisor in the NHGP Respiratory Specialty Advisory Group, he has helped to shape primary care guidelines and workflows in his organisation.

Challenges in Managing COPD in Primary Care

COPD is a relatively complicated condition to manage in primary care. An accurate diagnosis may be difficult to obtain, adherence to treatment may be low, and cost issues often limit optimal care. Suggestions for overcoming these difficulties will be presented.



Professor Wisia WEDZICHA

*Clinical Chair in Respiratory Medicine, Head, Respiratory Division,
Professor of Respiratory Medicine, Faculty of Medicine, National Heart &
Lung Institute*

Visiting Professor, Lee Kong Chian School of Medicine

About the Speaker

Wisla Wedzicha is Professor of Respiratory Medicine at the National Heart and Lung Institute, Imperial College, UK and Head of the Respiratory Division at Imperial College. She qualified from Somerville College, Oxford University and St Bartholomew's Hospital Medical College, London. She was elected FMedSci in 2013 and is an NIHR (National Institute of Health Research) Senior Investigator. She has received the Fellowship of the European Respiratory Society (FERS) and American Thoracic Society Fellowship (ATSF).

Professor Wedzicha has a major interest in the causes, mechanisms, impact and prevention of chronic obstructive pulmonary disease (COPD) exacerbations, She directs an active research group specialising in COPD exacerbations and early COPD, and has published extensively on this topic.

Prof Wedzicha was Editor-in-Chief of Thorax from 2002 to 2010 and is currently Editor-in-Chief for the American Journal of Respiratory and Critical Care Medicine. She has also previously been the Lancet Ombudsman and Publications Director for the European Respiratory Society.

Can We Prevent COPD with Early Intervention?

COPD is a major cause of morbidity and mortality worldwide. It is very costly to healthcare services. By the time most patients present to healthcare professionals, the disease is often advanced and current pharmacological therapies have limited efficacy. We now know that COPD starts earlier in mid-life and sometimes even in childhood. Data from the 1946 Birth Cohort in the UK shows that the presence of chronic bronchitis between the ages of 5 to 45 in smokers predicts who will subsequently develop COPD. However, relatively little is known about the pathophysiology of the airways in mid-life and the UK Early COPD cohort has been set up to study early COPD. Smoking cessation has benefits in this early group of smokers but more specific interventions will be needed e.g. targeting airway mucins. Current interventions that may be used in mild COPD and treatment-naive patients (as opposed to early COPD) will also be discussed.