

RANZCP & the NT PHN presents

# Travelling Scholar 2024

*Professor Murray Esler*

24–26 July 2024



Date	Time	Activity	Location	Details
<b>Wednesday 24 July</b>	11:00am– 2:00pm	1st Presentation	Red Lecture Theatre, Alice Springs Hospital	Presentation “Direct Measurement of Brain Serotonin Turnover: Bringing the “Brain Chemical Imbalance” Paradigm of Psychiatric Illness up to date”
	5:30pm– 8:30pm	2nd Presentation with NT PHN	Doubletree Hotel, Alice Springs	Presentation “Mental Stress Causes Cardiovascular Disease”
<b>Thursday 25 July</b>	6:30pm– 10:00pm	3rd Presentation with NT PHN	Mercure, Darwin Airport Resort	Presentation “Mental Stress Causes Cardiovascular Disease”
<b>Friday 26 July</b>	12:00pm– 2:30pm	4th Presentation	Menzies Auditorium, Darwin Hospital	Presentation “Direct Measurement of Brain Serotonin Turnover: Bringing the “Brain Chemical Imbalance” Paradigm of Psychiatric Illness up to date”



## Learning outcomes

### Mental Stress Causes Cardiovascular Disease

- 1 Understanding how mental stress causes heart disease
- 2 Understanding the acute triggering of cardiac events, and prevention
- 3 Gaining a knowledge of cardiac pathology linked to stress and anxiety (e.g. Takosubo cardiomyopathy)
- 4 Learning how Panic Disorder conveys cardiac risk, and how to prevent this
- 5 Understanding how occupational stress is a cardiovascular risk factor
- 6 Becoming familiar with social isolation and low economic stratum as heart risk factors
- 7 Understanding how psychotropic drugs can increase cardiac risk
- 8 Learning how depressive illness increases heart risk
- 9 Understanding the new biology of essential hypertension; mental stress, sympathetic nervous system activation, renal denervation
- 10 The management of hypertension complicated by psychiatric comorbidity

### Direct Measurement of Brain Serotonin Turnover: Bringing the “Brain Chemical Imbalance” Paradigm of Psychiatric Illness up-to-date

- 1 Understanding competing theories of the biology of psychiatric illness: Neural circuits vs. Neurotransmitters vs. Neuroplasticity
- 2 Understanding what “Brain Chemical Imbalance” might mean
- 3 Learning the evidence that the Brain Chemical Imbalance may be superseded.
- 4 Learn how to validly measure Brain Chemical Imbalances in psychiatry; serotonin, noradrenaline
- 5 Learn the real biology of noradrenaline in depressive illness and panic disorder
- 6 Learn the real biology of serotonin in depressive illness and panic disorder
- 7 Clinical application of measuring chemical imbalances in the brain