

LECTURE SERIES

ATMOSPHERE & AVIATION



You are invited to join us at Q Station for our upcoming edition of the Lecture Series program. Each month, Q Station hosts two guest lectures to speak on relevant topics of medicine, history and environmental issues. This event is free to attend, although bookings are required, and will be held in our A2 Dr Cumpston building. Please arrive 30 minutes beforehand to allow enough time for the shuttle bus service.

SUNDAY 2PM - 4PM, 18TH FEBRUARY 2018

Atmospheric Medicine and Meteorological Observations in Georgian England

At the end of the 17th century the medical appreciation of disease causation was little changed from the Hippocratic-Galenic centred essential cofactors of the weather, environment and atmosphere. The ancient Greek text, *On Airs, Waters and Places* was the quintessential text outlining the linkage between weather and disease. Eighteenth-century day-to-day variations in the atmosphere were recordings made by medical and non-medical personnel of temperature, humidity, cloud cover, wind and precipitation, invariably at a single site.

Whilst an understanding of the earth's atmosphere was not known to the 18th century natural philosopher, nevertheless, the central role of the importance of the constitution of the air was certainly viewed by the period's physicians as the dominant causal factor of bad health. Disease aetiology during the century was part founded in Galenic theory and hinged on natural constitutional factors, non-natural environmental elements and the contra-laterals or pathological components. Over-arching the disease treatments offered by the cure-care art of medicine was the *vis medicatrix naturae*, the healing power of Nature.

Enlightenment thinkers apprehended climate and its changes in a non-quantitative literate manner by promoting a brand of climatic determinism based on geographical location and the quality of the air. The technical reform gradually transformed meteorological experimentation from a mere descriptive art to an enduring quantitative science allowing for a coherent collection of weather observations and with it the growth of measureable climatology later in the 19th century.

Bruce Short is a retired specialist physician and completed an MA (History) in 2011 and M Phil at the School of Public Health, University of Sydney, in 2013. The thesis was "Dr Robert Robertson (1742-1829): Fever Specialist, 18th century Medical Experimenter and Senior Physician in the Royal Navy Medical Department". Following 8 years in the Permanent Air Force, Bruce undertook a parallel career from the early 1980s in the Royal Australian Air Force Specialist Reserve and was a former Surgeon General of the Australian Defence Force (part time Reservist, 2001-2005) and foundation editor of the Journal of the Australian Defence Health Service.

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Those magnificent men in their flying machines: balancing aviation and medicine

Historically, aviation and medicine have been strange travelling companions. The technology of aviation has been driven largely by engineering, economics, and commercial or military expediency. In attempting to push aircraft to new thresholds of performance, developers have frequently pressed against the limits of environmental, technological and biological knowledge. Considerations of human variability, fallibility and comfort generally came second. Therefore, the role of doctors and medical scientists has often been to determine the best ways to engineer humans around aviation technology, rather than vice versa. In exploring this history, three cases will be discussed. The first is the creation of medical standards for aircrew during World War I. The second encompasses attempts to overcome 'blackout' of fighter pilots in World War II. The third example considers the wide-scale adoption of flight simulators for training and evaluating pilots in the 1960s. In each case, I suggest, the result has been increasing regulation and automation, in contrast with the freedom promised by clear blue skies.

Dr Peter Hobbins is a historian of science, technology and medicine at the University of Sydney. His current research focuses on aircraft crashes and aviation safety in Australian history. His previous books have explored snakebite in colonial Australia and the history of Sydney's Quarantine Station. Written with archaeologists Ursula K Frederick and Anne Clarke, *Stories from the Sandstone: Quarantine Inscriptions from Australia's Immigrant Past* won a 2017 NSW Premier's History Prize.

Q Station is located at North Head Scenic Drive, Manly. Entry is free but reservations are essential. Complimentary tea, coffee and water will be available. The Visitor Centre at Q Station has some excellent displays and memorabilia that tell the stories of quarantine, infectious diseases and public health. Additional beverages, snacks or refreshments may be purchased at the Visitor Centre Kiosk or at the Boilerhouse Harbourside Restaurant and Bar.

If you are driving to QStation, follow the directions to North Head. After passing Manly Hospital, go through the stone arch 'Parkhill'. Follow this road until you reach a roundabout and turn right into the Q Station complimentary parking area. The shuttle bus regularly picks up from the waiting-room there and will transfer guests to the Lecture Theatre. Another option is to take the bus from Manly Wharf to Q Station Reception, then take a relaxing walk to the A9 Wharf Precinct venue. Be sure to leave sufficient time to be transported within Q Station by arriving early and enjoying the ambience! Take a walk and enjoy the views at North Head!

Paul Lancaster, Convener, Quarantine Station Community Committee, and Menzies Centre for Health Policy, Charles Perkins Centre, University of Sydney

To book your place at this Lecture Series event, contact Q Station's Tours Reservation Desk on 02 9466 1551 or H8773-CR5@accor.com.