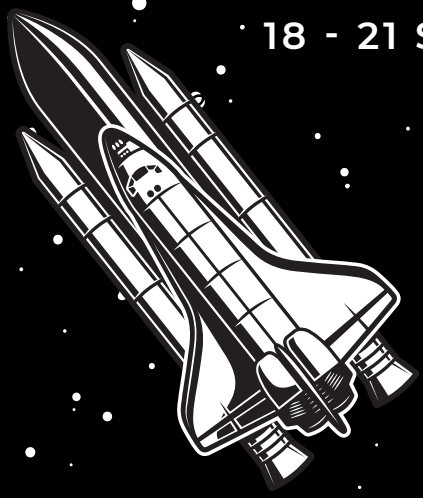
ASAM 2025 CONFERENCE

18 - 21 SEPTEMBER 2025 | HILTON ADELAIDE



ABSTRACTS BOOK

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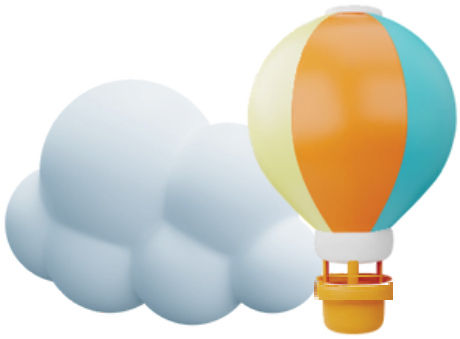

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CONTENTS

FRIDAY 19 SEPTEMBER 2025

0900 – 1000

JOHN LANE ORATION

Katherine Bennell-Pegg

Katherine Bennell-Pegg is the first Astronaut to represent Australia. She received her wings from the European Space Agency upon graduation from their 'Astronaut Basic Training' in April 2024, having passed their selection process. She is a member of 'The Hoppers' class, and as a professionally qualified government astronaut is eligible for future missions to the International Space Station, the Moon, and Mars. Katherine is also the first Australian woman to have qualified as a professional astronaut.

Katherine's career as a space systems engineer spans 15 years in space agencies and industry developing space programs and strategies, technologies, and missions – spanning Earth observation, science, interplanetary robotics, crew capsules and space stations - across six countries. As Director of Space Technology at the Australian Space Agency, she contributed to growing Australia's space capability through being technical lead on scoping the Moon to Mars Trailblazer "Roo-ver" lunar mission, developing plans to capitalise on Australia's space and technology strengths, and leading the Access to Space team that included satellite, infrastructure and launch capability uplift activities.

Katherine holds four degrees across science, technology, space and aeronautical engineering, as well as an Honorary Doctorate in Engineering. She is a Group Captain with the Royal Australian Air Force Reserve and was previously a member of the Australian Army Reserve where she received the Sword of Honour. She is also a keen volunteer including with Surf Life Saving South Australia.

In this presentation, Katherine Bennell-Pegg will share insights from her astronaut training journey, highlighting key experiences and the lessons they offer in resilience, adaptability, and teamwork. Katherine will explore the broader value of human spaceflight, emphasising how the knowledge, technologies, and capabilities developed in space programs translate into tangible benefits for society on Earth.

1030 – 1210 (SESSION 1)

PRESSURISED PEOPLE PROBLEMS

Weight No More – the Use of Old, New and Upcoming Medications in Aviation
Dr Aparna Hedge

Dr Aparna Hegde is a Perth based experienced GP with qualifications in General Practice, Public Health and Tropical Medicine, Aerospace Medicine and Aeromedical Evacuation. Her background includes full time RAAF service as a SAVMO and Chief Instructor at RAAF IAM, a tenure with Emirates Airlines as VP-Aviation and Occupational Medical Services and part time public service with CASA. She continues to work part time as a Medical Officer for CASA as well as serve in the RAAF Specialist Reserves as the Deputy Director of Aerospace Medicine. She is passionate about holistic health care and has recently opened her own practice called The Age Less Clinic and General Practice to optimise healthy longevity for her patients.

13 million people in Australia are classified as overweight (body mass index ≥ 27 kg/m2) or obese (body mass index ≥ 30 kg/m2) and are at risk of lifestyle diseases such as diabetes, cardiovascular and cerebrovascular disease, cancers and dementia. Pilots and Air Traffic controllers are not exempt from this epidemic and weight loss is essential to improve health and health-related quality of life.

Medications for obesity management are indicated in conjunction with lifestyle interventions in adults with obesity or those who are overweight with at least one complication of excess weight.

Five medications are currently approved by the TGA for obesity management in Australia, and the treatment pipeline is evolving rapidly, with a plethora of new agents under development for the management of obesity and its complications.

These medications are not without significant side effects and implications for safety critical work need to be taken into account in the approach to regulating for aviation related duties as well as implementing into aviation medicine clinical practice.

Type 1 Diabetes – the Kiwi Experience | Dr Tim Sprott

Tim has worked in the airline and regulatory aviation medicine - the last two years as CMO of CAA NZ. Interests include peer assistance networks, mental health, AOD, toxicology and anything that temporarily defies gravity.

CAA NZ certified its first class 1 pilot with insulin treated diabetes in 2019. This paper reviews CAA NZ's experience to date, the protocols and assessment guidelines developed, and the outcomes clinically and operationally of 7 pilots to date.

Challenges Navigating a Transgender Teenager Toward Meeting the Requirements for an Initial CASA Class 1 License | Dr Bruce Maybloom

Dr Bruce Maybloom MPH, MBA, MBBS, BN, FPAA(cert), AvMed(cert), DAME II is a GP working out of Bulimba in Queensland. In addition to Aviation Medicine, he is a 'Rainbow Friendly' doctor with a special interest in Reproductive and Sexual Health Medicine. In a former life, he was a keen Glider pilot..

Background/Purpose: Internationally, transgender pilots create challenges for aviation safety due to the potential negative effects of Gender Dysphoria. Concerns around medications also need to be addressed. CASA and the ADF have managed pilots who changed gender after having obtained their pilot licences or aircrew certification. The purpose of this work is to highlight the journey of a DAME, and a prospective teenage pilot towards realising an initial CASA Class 1 License.

Approach: In the absence of a CASA transgender guideline, a review of international guidelines and research was required. The approach also involved seeking advice from identified key persons with expert knowledge. Collated information informed planning of a roadmap towards an aviation medical and subsequent CASA assessment. DAME assessment of the prospective pilot involved both international videoconferencing and face-to-face clinical consultations over a 2-year period. To streamline CASA assessment, pre-empting rate limiting steps, such as the need for expert psychiatric assessment and medication review were identified and managed.

Outcome/Impact: The outcome of this process, was the identification and management of steps in getting a teenage transgender prospective pilot, to meet prescriptive and unwritten safety standards to realise their initial Class 1 licence. It provides a roadmap for future transgender applicants.

Innovation and Significance: In the absence of a CASA transgender guideline, this work, demonstrates a pathway for transgender persons to achieve Class 1 pilot status while enabling authorities to ensure safety issues, such as Gender Dysphoria and medication use are addressed.

Disclosure: No conflict of interest identified. Informed written consent from candidate gained. No influences or reward in any form from an external source.

Bicuspid Aortic Valve Disease in Aircrew – Implications, Assessment and Management Decisions | Dr Christopher Smith

Dr Christopher Smith has 25 years experience as an adult cardiac surgeon in Brisbane. His practice has a focus on valvular and thoracic aortic disease. He is also an accredited transcatheter aortic valve (TAVI) implanter. He has an interest in aviation medicine, has been an aviation enthusiast and aircraft owner, and is a private pilot.

Bicuspid Aortic Valve (BAV) is the most prevalent congenital cardiac defect, occurring in 0.5-1% of the population. It is the most common cause of a murmur heard at aviation medical examination. Bicuspid valvular anatomy leads to premature degeneration of the aortic valve with development of aortic stenosis and/or regurgitation typically occurring a decade earlier than with trileaflet aortic valves. Because of this, BAV disease in aircrew may present, progress and require intervention during their flying career.

In addition to the valvular pathology, BAV disease is frequently associated with thoracic aortopathy, causing dilatation of the ascending aorta or aortic root, with the risk of aortic rupture or dissection. Also, the bicuspid aortic valve carries a higher risk of infective

endocarditis, and may be associated with other congenital abnormalities such as coarctation of the aorta.

In view of this, careful assessment and management decision-making is critical to optimise the timing of intervention and to provide the best lifetime management plan for these patients. Aeromedical assessment of BAV patients needs to also consider the unique environment in which aircrew operate, including exposure to G forces, hypoxia, effects on cardiac output and potential operations from remote or international ports. These environmental factors need to be considered when assessing the aeromedical risk of impaired performance or incapacitation in aircrew with BAV disease.

All aircrew have operational responsibilities, however some roles have flight-risk or mission-risk implications in the event of a medical episode. Aeromedical Risk Matrices may be of use to help clarify both the risk and operational impact of potential medical events in aircrew with BAV disease, and aid in providing individualised assessment and management in BAV aircrew.

Vertebral Artery Dissection Stroke in a 58-Year-Old Airline Pilot Following Prolonged In-Flight Neck Hyperextension | Dr Christian Gericke

Prof Gericke is a Neurologist, Epileptologist, and Clinical Professor of Medicine at the Australian National University. He also serves as Squadron Leader and Aerospace Neurologist in the RAAF, and as DAME and CASA-approved Aviation Consultant in Neurology.

Previously, he worked as an academic neurologist at Calvary Mater Newcastle, Prince Charles Hospital in Brisbane, King's College Hospital London, and Sheffield Teaching Hospitals.

After graduating from medical school in Berlin, he trained in neurology at the Charité, followed by adult and paediatric epilepsy fellowships in Strasbourg and Geneva. He holds two research doctorates and master's degrees from the Universities of Cambridge and London.

He chairs the Australian and New Zealand Association of Neurologists Therapeutics Committee and the Neuroepidemiology Section of the American Academy of Neurology. He serves on the International League against Epilepsy Standards and Best Practice Council and the International Aerospace Neuroscience Consortium.

Introduction
This report describes the case of a 58-year-old long-distance airline pilot who suffered a work-related vertebral artery dissection, resulting in a right posterior inferior cerebellar artery (PICA) territory infarct.

Background
Stroke aetiology is crucial for aviation medical certification, as dissection-related strokes have a significantly lower recurrence risk than atherosclerotic or cardioembolic strokes. This case highlights the diagnostic challenges and implications of a vertebral artery dissection stroke following minor mechanical neck trauma. Controversy remains about a genetic

predisposition contributing to dissection strokes.

Case Presentation
A 58-year-old male pilot presented to an overseas hospital with hyperacute onset vertigo, headache and vomiting, following an extended period of neck hyperextension during in-flight instruction of another pilot. The patient was diagnosed and treated as an atherothrombotic ischaemic stroke. A cardioembolic source was excluded. After eight days of hospitalisation, he regained full neurological recovery, and a repeat MRI brain showed no significant changes, but no MR angiography (MRA) was performed.

Two sequential post-discharge MRI/MRAs in Australia revealed a right vertebral artery narrowing with luminal irregularity and focal occlusion, consistent with sequelae of a vertebral artery dissection. Doppler ultrasound confirmed a small-calibre right vertebral artery with no flow; other neck and brain vessels were normal. Therefore, the aetiology of the stroke was changed to a vertebral dissection, with a consequent change of treatment. The patient remains neurologically well with a significantly more favourable prognosis for returning to flying, pending CASA review.

Discussion
This case highlights the importance of accurate stroke diagnosis and classification in aviation medicine. It underscores the importance of diagnosing rarer vascular pathologies and estimating recurrence risks, especially in a fit, healthy pilot without cardiovascular risk factors. Unearthing the underlying pathology in this case has significant implications for the concerned pilot's odds of returning to flying and for his workers’ compensation insurance claim.

1330 - 1450 (SESSION 2)

PRESSURISED PEOPLE IN PRESSURISED SITUATIONS

The Next Step – Integrating Pilot Mental Health Into SMS | Dr Tim Sprott

Tim has worked in the airline and regulatory aviation medicine - the last two years as CMO of CAA NZ. Interests include peer assistance networks, mental health, AOD, toxicology and anything that temporarily defies gravity.

The traditional regulatory approach to mental health issues in pilots has been reactive, based on case finding and a safety 1 approach. Some unintended consequences have included pilot healthcare avoidance, non-disclosure, and the development of 'safety theatre'. This presentation proposes a safety 2 approach based on using salutogenic principles, using SMS principles to manage risk, and briefly outlines the Safe Haven initiative.

Meshing It All Together, Mental Health Cases Studies in Aviation Medicine, Putting Into Practice the CASA MESH (Mental Health Safe Haven) DAME Framework | Dr Annalyse Crane

Dr Annalyse Crane has worked as a community DAME for 9 years, she has experience in all aspects of aviation medicine and enjoys watching pilots and ATC grow in their career and manage the changes as they age and become unwell due lifestyle changes that impact their career. Her goal is to keep her crew fit and well with open communication and a positive ongoing DAME relationship. She enjoys skiing and ocean swimming despite hating the cold.

A presentation of 3 case studies about mental health conditions in all classes of aviation medicals. A break down of how these de identified cases presented to the DAME and how CASA, Aviation Psychiatrist and Specialist services such as workplace psychology, Air Services SOAR peer support program and workplace sick leave provisions and non operational roles are imperative to have skilled workers in aviation sensitive environments return to work. By fostering an open and supportive DAME / Airman relationship with the support of CASA, all of these cases returned to operational roles in a welcomed time frame, fitter and healthier than before they approached the DAME for help.

Being a CASA MESH DAME is an additional tool that enables DAMEs to work with complex mental health cases that would otherwise go unreported and pose a greater risk to air safety, business operation and patient wellbeing.

Case 1 - Class 1 - telehealth consult for medication advice, prescribed ritalin and wishes to report his new medication for ADHD.

Case 2 - Class 2 - Presents for DAME clearance following PTSD from occupational trauma involving children resulting in anxiety, anger and adjustment disorder when having to work in environment where children were involved in medical retrieval

Case 3 - Class 3 - ATC presents for advice regarding Domestic Violence charges and how this would impact up and coming aviation medical - opened up about additional medical history including multiple mental health conditions not previously addressed.

Integrating Wellbeing Into Aviation Safety Systems: From Theory to Practice With SOAR and Safe Haven | Capt. Laurie Shaw

Laurie Shaw is an A350 Captain with Fiji Airways and a veteran of the aviation industry with over 40 years of operational experience, including senior roles at Cathay Pacific, Ansett, and Malaysia Airlines. He has played a leading role in advancing aviation wellbeing, human performance, and psychological safety—particularly through the integration of peer support, early intervention, and systems-based approaches to mental health. Laurie has worked extensively with regulatory and industry partners to embed wellbeing into organisational practice, drawing on ISO 45003, Safety II Principles, and neuroscience to support safety-critical teams. His current work focuses on treating wellbeing as a core enabler of both safety and sustainable performance.

Traditional approaches in aerospace medicine have often treated wellbeing and safety as separate issues—focusing narrowly on whether someone is “fit for duty,” while overlooking the broader organisational and environmental factors that impact health and performance. At Airservices Australia, a new model is emerging—one that recognises wellbeing as a shared responsibility and a critical component of operational safety.

This paper outlines how a people-first approach—drawing from neuroscience, psychological safety, and practical health frameworks—is being embedded into aviation safety systems. It highlights how contemporary regulatory tools such as ISO 45003 and Australia’s 2024 Psychosocial Hazards Code of Practice are helping to reframe wellbeing not as a side initiative, but as part of core organisational design and leadership practice.

At the centre of this transformation are three key programs: the PAN Priority Peer Support Program; its dedicated return-to-work pathway, SOAR (Supportive Occupational Airservices Rehabilitation); and CASA’s Safe Haven framework. These programs create trusted, confidential spaces where aviation professionals can access support during high-stress periods or following critical events. They emphasise prevention, early intervention, and connection—moving beyond reactive models of care.

Emerging results suggest that when wellbeing is understood through the lens of dynamic homeostasis—the body and brain’s ability to return to balance after stress—organisations benefit from greater trust, improved focus, and reduced stigma. By embedding these supports within operational systems, safety-critical industries can evolve from compliance-driven to human-centred.

This presentation argues that the future of aerospace medicine lies in integration, not isolation—with wellbeing at the heart of both safety and sustainable performance.

How to use hypothesis "formulation" to minimise Mental Health evaluation time | Dr Trang Dao

Training Med School, Université Paris VII

Residency, Université de Montréal

Fellowship, Harvard University

Positions McGill, 1990-2004

Santa Cabrini Ospedale, 2000 - 2022

Expertise Liaison Consultation

Trans-cultural Psychiatry Aviation

Context

The mental case history consumes a huge amount of time. Close questions of structured interviews and diagnostic test kits are more time efficient, but have built-in flaws from the

categorisation system these derive from. As neither accounts for a person's uniqueness, a 2nd step direct exam is required to interpret the score in light of observed non-verbal cues, and to justify the diagnostic. Yet, this 2-step process is rarely applied in aviation, if at all. Besides, a direct exam is (still) the golden standard for diagnostic accuracy, and must not be replaced with testing alone.

Saving time with quick technics is also implicitly confessing de facto to the clinicians' limits with patients who don't yield information. However, such approach cannot distinguish concealments of unfitness for duty from the ubiquitous self unawareness.

Other time issues are: interview focus controlled by abundant irrelevant topics, pressure of speech; charting notes; addressing fake news, AI or Google Doctor; etc.

As a result, DAME become disinvested in psychiatry or acquiring exam skills.

Instead of the classic case history structure, the bio-psycho-social formulation approach is more time efficient to get the same data. It is an executive summary of factors contributing to issues at stake.

Aims: Use the bio-psycho-socio-occupational formulation to efficiently

1 manage & control the time allocated to the evaluation

2 collect crucial data

3 and acquire a can-do confidence.

Conclusion:

Formulation is a very practical time efficient tool. It helps to correct patients' misconception and define treatment plans.

Target: DAME with basic skills and averse to psychiatric evaluations.

Limitations:

This approach is only valid:

- for high profile professionals

- in the aviation culture context
- in an out-patient setting

It is not appropriate for therapeutic assessments and has limits in assessing other populations.

Are You Ready for Autopilot Medicine? How AI Is Transforming Healthcare and Aviation Medicine, and How to Prepare | Dr Jo Darby

Currently serving as a Director within the Office of the Deputy Surgeon General, Joint Health Command. GPCAPT Darby is involved in projects relating to clinical governance reform and the new Health Knowledge Management system (HKM). Previously, GPCAPT Darby held prominent roles including Commanding Officer of the Institute of Aviation Medicine (IAM) and is a Senior Aviation Medical Officer (SAVMO). GPCAPT Darby is deeply passionate about digital health and artificial intelligence (AI), actively pursuing advanced studies in AI and digital health transformation at Harvard University and as part of her capstone project developed PredictEVAC an AI Model. She hold a Certified Health Informatician Australasia (CHIA) certification. As a committed advocate for ethical and responsible technology use, is a member on the Defence Responsible AI Working Group. GPCAPT Darby is an advocate for digital health innovation and responsible application of AI in improving healthcare outcomes.

Once speculative science fiction, Artificial Intelligence (AI) now revolutionises healthcare with unprecedented speed, accuracy, and diagnostic capability. For Aviation medical professionals, AI presents extraordinary opportunities and critical questions: Can AI predict and manage aeromedical risks better than humans? Could professional obsolescence occur within a decade? How can we best maximise the benefits and mitigate risks associated with AI?

This presentation explores AI and digital health innovations in Aviation Medicine, clarifying essential terminology such as Machine Learning (ML), Large Language Models (LLMs), Agentic AI, Generative AI, Retrieval-Augmented Generation (RAG), and foundational AI concepts. It highlights legal, ethical, security, and practical challenges associated with AI, emphasising responsible AI frameworks and guardrails. It also underscores the urgency for clinicians and regulators to rapidly build expertise and adapt to swiftly evolving technologies.

Current aviation medicine AI technologies include AI scribes automating medical documentation and point-of-care decision support systems delivering rapid, evidence-based guidance. Predictive analytics integrating wearable biosensor data with flight metrics proactively identify risks such as fatigue and physiological deterioration. These innovations establish a foundation for personalised medicine, combining genomic information with advanced AI analytics for highly individualised health risk assessments, potentially transforming traditional medical certification.

However, risks remain. AI may produce plausible yet incorrect recommendations, perpetuate biases, and create accountability gaps. "Black box" models with opaque decision-making processes and continually adapting self-supervised AI models pose unique regulatory challenges compared to conventional medical devices and software. Erroneous AI-driven

outputs could jeopardise clinical and flight safety, underscoring the importance of transparency, robust governance and oversight, effective regulation with routine assessments to detect and address biases, and strong cybersecurity measures informed by responsible AI principles.

Success requires aviation medicine professionals to rapidly acquire AI literacy and maintain vigilant oversight.

1510 - 1710 (SESSION 3)

FIT TO FLY, BUT ONLY JUST

Analysis of Medical Presentations Across Major Australian Airports | Dr Aaspreet Boparai

Dr. Aaspreet Boparai is a medical graduate of the University of Otago, New Zealand, where his early interest in aviation medicine was sparked during an elective placement with Air New Zealand. This experience laid the foundation for his ongoing passion for aviation medicine.

He is currently an Aviation Medicine Registrar at Qantas, training under the Australian Medical Training Program (AMTP). In addition to his registrar role, Dr. Boparai is a Fellow of the Royal Australian College of General Practitioners (RACGP), a Designated Aviation Medical Examiner (DAME), and a certified Medical Review Officer (MRO).

There is limited information in the literature regarding medical presentations at Australian airports and globally. Here, we present a detailed analysis of medical presentations across four major Australian airports: Brisbane (BNE), Perth (PER), Sydney (SYD), and Melbourne (MEL). The objective was to identify prevalent medical presentations, geographic distribution and demographic trends in the setting of medical airport screenings. Data was collected from gate screenings and medical presentations at these airports during 2025. The presentations were categorised by primary health issue (musculoskeletal, cardiac, respiratory, gastrointestinal, neurological, and others), location (boarding gate, pre-check-in), flight sector (international or domestic), and demographics. Across all airports, the results showed the highest incidence of musculoskeletal presentations, followed by gastrointestinal, cardiovascular, and neurological cases. We noted a high incidence of cases which involved patients who were recently discharged from hospital; a higher frequency of hospital-based presentations was found at PER and BNE, likely due to the regional connectivity and increased number of patients travelling from rural or regional area. Most of these presentations were within the scope of our existing MEDA guidelines. There is also scope for developing streamlined protocols and targeted interventions to address commonly seen presentations more effectively. The findings also provide insight to DAME’s in identifying distinct regional health patterns and the common challenges and presentation that frequently arise across diverse operational and geographic settings..

Qatar Airways – QCare 24/7 Staff Hotline Developing a Dedicated Helpline for Exclusive Use to Qatar Airways Passengers, Staff and Families | Gayle Nelson

A registered Nurse for over 25 years with advanced specialist nurse practice privileges in the UK. Master in Public health and IHLM diploma in healthcare leadership and management. I have been working in Qatar for 15 years, heavily involved in making Qatar's National Health Strategy come to life. I have recently joined Qatar Airways and am leading nursing in the Occupational and Primary healthcare expansion programs to ensure our staff at QR receive the best and most timely healthcare provision.

“Developing a dedicated helpline for exclusive use to Qatar Airways passengers, staff and families, giving immediate access to a nurse for clinical help and advice and arranging clearance and appointments with appropriate physicians if needed.”

Background

Airline employees work across time zones, often in remote or high-stress environments, with limited access to timely healthcare advice. Recognizing the need for continuous, accessible support, Qatar Airways developed a nurse tele-triage and email query service to ensure all staff can access qualified clinical guidance and occupational health support, wherever they are in the world.

Objective

To create a centralized, nurse-led service offering clinical triage and email-based query resolution for Qatar Airways staff, improving access to health information, reducing unnecessary clinic visits, directing staff and their families to preferred clinical providers and supporting staff wellbeing.

Results

Anticipated that In the first six months, the service will receive over 2,000 triage calls and over 12,000 email queries.

Email query including Mediff will improve TAT with the extended hours of service as we progress with our project plan.

The most common issues included acute symptom advice, sick leave validation, psychological support, and navigation of approved providers.

Staff surveys will be conducted to ensure we are achieving NPS score over 90% satisfaction, with an emphasis on strong feedback on accessibility, professionalism, and convenience.

Conclusion

The Qatar Airways nurse tele-triage and email consult service should provide an effective, scalable model for improving healthcare access among a globally mobile workforce. It should demonstrate how aviation medicine can leverage telehealth to support staff safety, operational continuity, and employee wellbeing.

Unilateral Profound Hearing Loss in a Cabin Crew: Aeromedical Decision Making | Dr Venkata Kama Atmakuri

Presenter is an experienced Aerospace Medicine Specialist. After serving in the Indian Air Force for 24 years, he is now working as Company Doctor and AME with Qatar Airways since last 03 years. He has extensive experience in both Civil and Military Aviation fields. He has presented several papers in both India and abroad. He has several publications to his credit in the Indian Journal of Aerospace Medicine. His areas of interest include Human Space Missions, Civil Aviation and Accident Investigation.

INTRODUCTION: This paper examines the aeromedical decision making process for a Qatar Airways Cabin Crew member with Unilateral Profound Hearing Loss, focusing on his safe return to flying duties while maintaining stringent flight safety and passenger service standards. The paper also discusses functional assessment checklist designed inhouse.

CASE DETAILS: This 54 year old male Cabin Crew suddenly experienced complete loss of hearing in his Right Ear. Extensive radiological and ENT evaluation showed no abnormalities. His monoaural hearing loss persisted despite trials with Intra Tympanic steroids and Hyperbaric Oxygen Therapy. However, his Left Ear functioned normally.

FUNCTIONAL ASSESSMENT PROTOCOL: To determine his suitability for role as Cabin Crew, a comprehensive, tow part functional assessment was carried out on ground and in aircraft. Initially, his ability to use an Automated External Defibrillator was tested in a Flight Deck Simulator with background aircraft noise. He successfully heard the AED prompts and responded adequately, demonstrating satisfactory comprehension. Next, he was tested in a aircraft in flight. A check list was exclusively designed inhouse for the purpose to evaluate his performance of safety critical and pax service related tasks. He was tested for (1) Hearing and comprehending verbal communication and (2) Hearing and adequately responding to public announcements, intercom, chimes, bells, alarms and door knocks. The Crew performed all tasks satisfactorily.

AEROMEDICAL DECISION: Based on his successful performance in all safety sensitive and service oriented tasks, the Crew was returned to flying duties.

CONCLUSION AND FUTURE APPLICATION: This case demonstrates that individuals with unilateral profound hearing loss can potentially continue in demanding roles like Cabin Crew, provided functional assessments confirm their ability to perform all critical duties without compromising safety or service. This approach offers a valuable framework. It can be extended to Deck Crew with similar hearing conditions by employing comparable functional assessment protocols.

"Chicken or Pasta…"Cabin Crew Medical Standards in International Comparison and Case Presentation | Dr Oliver Brock

Undergraduate Social Sciences at the University of Hanover, Germany 1986

State examination Medicine at the Medical University of Hanover, Germany 1992

Promotional thesis about working conditions of flight attendants 1992

Specialist training Family Medicine/Occupational Medicine/ Aviation Medicine in Hanover, Hamburg, Frankfurt

Different positions in major companies like Lufthansa German Airlines, German Post, City of Hamburg

Since 2016 own clinic in Hamburg for Family Medicine/ Aviation Medicine and Occupational Medicine

Senior medical examiner all classes EASA (since 2000), CASA (since 2007), CAA NZ (since 2008)

Aeromedical presentations at various ICASM congresses since 1997 as well as at ASAM congresses in HKG 2013, SYD 2019, Hobart 2023, doing CME Sessions for GP´s and medical education for professional and private pilots.

Passionate active private pilot since 1982 with EASA, CASA and FAA PPL

Although there is far more Cabin Crew (CC) than flight deck personnel working in a safety relevant environment ICAO does not call for specific CC medical licensing. The importance of able CC being responsible primarily for the safety of passengers is however being reflected in the SARPS as well as in the some international regulations. This presentation compares some different worldwide approaches in dealing with evaluating the fitness of CC. Differences in risk mitigation among the legislations of CASA, CAA NZ, EASA and FAA will be shown as well as a few interesting cases of known inflight Cabin Crew incapacitation, supplemented with statistics. Finally pro´s and con´s of having or not having compulsory medical examinations mandated by the legislator are discussed.

Aviation Pandemic Preparedness Program: An Adaptable Modelling Framework for Infection Risk and Control | Dr Jason Armstrong

Dr Jason Armstrong received a PhD in “Spaceflight Immunology” from a NASA Center in the USA in 1994. The 1990s saw Jason place payloads on 4 space shuttle flights and personally fly on the NASA "zero-g vomit comet" in a variety of circumstances for payload development. Immediately following his early career NASA related work, Jason worked in the US biotech industry in immunology for a further 10 years and on returning to Australia in 2005 was CEO of a clinical diagnostic company that went public on the Australian stock exchange. He also led Med-e-Serve as CEO for 4 years A UQ owned entity educating clinical doctors and for professional development/registration.

Since 2013 Jason has led Boeing Research and Technology in Brisbane which includes a portfolio of mixed aerospace technologies. In addition ot this R&D oversight role, he also leads Boeing’s research role globally for “Disease transmission prevention”.

Background

Global pandemics and seasonal epidemics have significant economic and health impacts on the aviation industry, travelling public, and to public health bodies from the translocation of disease. Despite the impact, the aviation industry currently lacks evidence-based knowledge of the mechanistic dynamics of infectious disease transmission in air travel and how multiple

control measures fit together to prevent disease transmission outside of specific individual events. Here we develop a systematic and holistic framework approach to examine disease transmission risk that is transferable to multiple pathogens and settings in the aviation system.

Methods

The framework provides a method to integrate a number of empirically driven mathematical models, including screening and testing, computational fluid dynamics, pathogen transmission; agent-based human movement and behaviour; and epidemiological models within the operational environment of commercial aircraft and airports. The framework defines the functionality required in each sub-model, and the required interfaces between models for data exchange. The integrated framework is then run using Monte Carlo methods to evaluate transmission risk and to optimise control strategies for a given pathogen.

Results

We show that the framework can be used to simulate a variety of infectious agents and characterize control measures used in risk reduction and mitigation. The framework is able to be run in a systematic way that allows data to be transferred between the different sub-models and for each sub-model to be run independently and at the numerical fidelity required.

Conclusion

This framework was developed in response to the U.S. Department of Transportation National Aviation Preparedness Plan. It provides a quantitative evidence-based disease transmission risk framework and suite of modelling tools needed to improve understanding of disease transmission throughout the global air travel ecosystem and to develop a risk management tool that is scalable to changing complex environments and adaptable to multiple infectious pathogens.

COVID-19: The Gift that Keeps on Giving? | Dr Ian Cheng

Ian is a Senior Staff Specialist in Occupational & Environmental Medicine based at Royal North Shore Hospital in Sydney. Ian also works in private practice specialising in Occupational and Aviation Medicine having previously consulted for IBM, QANTAS Airways and the Civil Aviation Safety Authority.

Ian is a Fellow of the Australasian Faculty of Occupational and Environmental Medicine, a Foundation Fellow of the Australasian College of Aerospace Medicine, an academician of the International Academy of Aviation and Space Medicine, a Fellow of the Royal Aeronautical Society and a past President of the Australasian Society of Aerospace Medicine.

Two pilots develop venous thromboembolism (VTE) after contracting COVID-19; coincidence or causative?

SATURDAY 20 SEPTEMBER 2025

0905 – 1005

PATTERSON TRUST LECTURE

Aviation or Aeromedical risk - two sides of the same coin
Dr Anthony Wagstaff

I have worked in Aerospace medicine since 1991, combining research, clinical, teaching and advisory activities. Primarily, my activity has been supporting the Norwegian Air Force, but I have all along also been active as a civilian AME in Norway /EASA. My guiding interest has been to understand the interaction between the stresses of flight and the health of aircrew. Therefore, I have had a wide range of research activities, spanning from noise and vibration, hypoxia, ergonomics and preventive medicine to human factors and fatigue. I enjoy interdisciplinary work, as cross-learning between specialists often lead to new understanding.

My major contributions in Norwegian Aerospace Medicine have been 1) integration of occupational health principles with Aviation medicine and human performance activities, using research as the reference point along the way and 2) Trying to create a better trust relationship between pilot/aircrew and AME ("pilot-in-the loop") and emphasising risk assessment in order to better utilise the pilot´s own perceptions and evalutations regarding his/her health in relation to flying.

I have been active in international organisations in Aerospace Medicine for many years, both within Europe (ESAM president 2016-2020) and in the broader international context (Chancellor, International Academy of Aviation and Space Medicine 2021-2025. I have been lucky to be able to experience the knowledge, wisdom and friendship of many international colleagues, and thus also been able to actively participate in the development of collaboration between the different international Aerospace Medical organisations.

Aerospace mediciine involves, among other activities, to assess aero-medical risk. The culture and assessment of medical risk in the realm of clinical medicine is mostly based on clinical diagnosis. The consequences of medical symptoms in flight depend on the type of operation, aircraft and compensatory measures (one being the presence of a co-pilot). The assessment of medical risk based on diagnosis and clinical judgement has therefore serious shortcomings as a contribution to flight safety, without understanding the role, tasks and coping possibilities of the pilot in question. In addition, since under-reporting among pilots may often be the case regarding relevant medical symptoms and conditions due to fear of loss of license, clinically-based aeromedical assessment is at best inaccurate,

In order to improve assessment accuracy and pilot reporting, the aero-medical system could benefit from well-developed tools used in safety risk management, which then could be based on a better informed, more trustful dialogue with the pilot and other personnel with flight operational expertise.

1030 - 1210 (SESSION 4)

WE ARE ALL JUST TRYING TO KEEP THE PILOT CONSCIOUS

Aviation Safety and Acute Medical Incapacitation Risk: A Reality Check | A/Professor Marcus Skinner

Marcus is a specialist anaesthetist in public and private sector and a DAME and just retiring. He went through the RAAF medical undergraduate program then an operational MO and then RAAFSR medical officer after specialising. He undertook the USAFSAM (School of Aerospace Medicine) Flight Surgeons program in San-Antonio Texas and has been a DAME over a number of decades. Experienced in aeromedical retrieval and Trauma. He has specialist interest in and lectured on the risk and safety of anaesthesia outside the operating theatre and aware that both the anaesthesia and aviation professions prioritise risk mitigation. He has been flying since he was 16 , is private a pilot, and aircraft owner with CIR, aerobatic and formation endorsement.

Over a 40 year aviation medicine career I have seen many improvements in aviation safety and changes to regulatory standards to prevent the compromise air navigation safety. The concept that inflight medical incapacitation is part of a spectrum of risk was proposed in the 1980's with practice accepting the "1% Rule" as the "benchmark" for the regulatory approval to permit solo pilot operations. As a DAME have you ever asked yourself "What does that actually mean?". This talk provides a "reality check" on the relationship between real world medical risk and flight safety standards illustrated using a case example and current evidence with a modified risk matrix.

In flight medical incapacitation events are exceedingly rare, accounting for less than 1% of world-wide aviation accidents and incidents. (0.6% in single pilot operations on the Australian Transport Safety Bureau database) . The available evidence, from Australian and other developed aviation systems indicate that fatal accidents due to pilot medical incapacitation in general aviation occur at a rate of 1.4 per million flight hours. For any individual pilot that means they would need to fly for roughly 7,000 years at 100 hrs per year to statistically expect a fatal accident from medical incapacitation. In private pilots the rates are reported less than one per million flight hours for a pilot flying 100 hrs a year, far less than the 1% threshold.

Our terminology, our expectation and our perception have become entwined to produce a milieu of lost reality between the Pilot, the DAME and the Regulator as to the real world risk. The case presented explores this relationship.

We need to move to a modified risk matrix and conduct assessment that incorporates medical risk evidence and safety reality as it effects the individual pilot's ability to exercise the privileges of their licence.

Aeromedical Certification of Pilots With a History of Traumatic Brain Injury | Professor Christian Gericke

Prof Gericke is a Consultant Neurologist and Epileptologist at Canberra Hospital, Calvary Bruce Private Hospital and Clinical Professor of Medicine at the Australian National University.

He serves as Squadron Leader and Aerospace Neurologist in the RAAF, as CASA-approved Aviation Consultant in Neurology, and is a Member of the International Aerospace Neuroscience Consortium (IANC).

Previously, he worked as an academic neurologist at Calvary Mater Newcastle, The Prince Charles Hospital, King's College Hospital London, and Sheffield Teaching Hospitals.

After graduating from medical school in Berlin, he trained in neurology at the Charité, followed by epilepsy fellowships in Strasbourg and Geneva. He holds two research doctorates and master's degrees from the University of Cambridge, the London School of Economics, and Deakin Business School.

He chairs the Australia and New Zealand Association of Neurologists (ANZAN) Therapeutics Committee and the American Academy of Neurology (AAN) Neuroepidemiology Section.

Traumatic brain injury is one of the most common neurological conditions seen in both civilian and military pilots. The brain's complexity is reflected in the injuries it suffers.

Injuries differ significantly based on the mechanism of injury, the force involved, whether they are acute or chronic, their location in the brain, the size and number of lesions, associated neuroimaging findings, other injuries in different organs, the patient's age, risk factors, medications, and more.

Typically, two factors drive the annual risk of incapacitation for these pilots: 1) the likelihood of developing epilepsy in the future and 2) the presence of subtle cognitive deficits, including impairments in executive functions and emotional and behavioural control.

In this presentation, I will highlight the key features to consider when assessing pilots with a history of traumatic brain injury based on case studies from my aerospace neurology practice.

I will subsequently review the current CASA and international aviation medicine guidelines regarding traumatic brain injury in the UK and US, as the approach to aeromedical certification varies significantly between these countries.

The Incidence of Cancer Diagnosis in ADF Aircrew 2002- 2021 | Dr Thomas Kennedy

Dr Kennedy was commissioned in the Royal Australian Air Force in 2012 as an undergraduate Medical Officer. After completing his graduate medical training at the University of Queensland in 2014 he completed postings in expeditionary health squadrons at Amberley, Tindal and Edinburgh. He holds a Fellowship of the Royal Australian College of General Practitioners, a Diploma in Aviation Medicine and is a registrar in the Australasian

College of Aerospace Medicine. He has completed deployments in the Middle East, the Indo-Pacific and supporting domestic natural disaster response.

In response to concern of an increased incidence of cancer diagnosis amongst US Department of Defence Aviators, The Royal Australian Air Force Institute of Aviation Medicine commenced an analysis of the Aircrew Military Employment Category Reviews from 2002 to 2021 to identify cancer diagnoses. These diagnoses were compared to cancer incidence data from the Australian Institute of Health and Welfare to determine the Standardised Incidence Ratio (SIR) for cancer diagnosis amongst ADF aircrew whilst serving. This study identified 77 cases of cancer diagnosis and a SIR of 0.93 (85% CI 0.73-1.2). The data does not indicate an increased incidence of cancer diagnosis amongst serving ADF aircrew compared to age and gender matched Australian populations.

Prevalence of Back and Neck Complaints in Military Rotary Wing Aircrew | Nadine Cooper

Nadine Cooper is an experienced Research Specialist with the Australian Defence Force (ADF), currently serving at the Fleet Air Arm. With over two decades of diverse experience in rehabilitation counselling, human performance research, and safety systems within defence and civilian contexts, Nadine brings deep expertise in managing complex occupational health and human factors challenges.

Nadine is currently pursuing a Doctor of Philosophy at the University of Canberra, focusing on spinal and musculoskeletal pain within aviation cohorts. This follows a strong academic foundation that includes a Master of Arts in Research (2010), with a thesis on risk-taking and sensation seeking among youth in alpine sports; a Master of Rehabilitation Counselling from the University of Sydney (2009); and a Bachelor of Exercise Science and Psychology from the University of Wollongong (2004).

Background:

Rotary-wing (helicopter) aircrew—including pilots, flight engineers, and systems operators—face elevated occupational and ergonomic risks, especially to the lumbar and cervical spine. These injuries can reduce wellbeing, impair workforce health, and compromise operational readiness. Understanding the mechanical loading experienced during flight is critical to developing evidence-based strategies for injury prevention through improved training, reviews, and technique optimisation.

Methods:

A systematic review of five databases assessed the global prevalence of spinal pain in military rotary-wing aircrew. This was followed by a local prevalence study within the Australian Navy's Fleet Air Arm (FAA) and inflight data collection on workload factors, including vibration and posture, using sensor systems.

Results:

Globally, data from 28 studies (3,786 crew) showed that 64% reported back pain and 59% neck pain. Locally, 66% of FAA aircrew reported significant back pain, and 44% neck pain.

Of these, 62% (back) and 74% (neck) noted performance limitations in the past 12 months. The FAA lost 2,134 days to spinal-related medical grounding in one year, costing over $800,000 in wages.

Inflight data revealed substantial variation in neck loads by crew position and helmet design, with cumulative loads differing by a factor of two within the same sortie type. Neck extension and rotation were linked to the highest peak loads, and loading frequency showed left-right asymmetry.

Conclusion:

Rotary-wing aircrew experience significantly higher rates of back and neck pain compared to the general Australian population (16% reporting back issues in 2022). These findings highlight a substantial occupational burden and justify targeted interventions to reduce spinal injury and enhance operational capability.

KEYWORDS: Rotary-wing aircrew, Spinal pain, Neck pain, Back pain, Biomechanical loading, Occupational health and Military aviation.

GO2Altitude® Hypoxicators: From Classroom Hypoxia Familiarisation to Simulator-Integrated Physiological Event Trainers (2005–2025) | Oleg Bassovitch

Oleg Bassovitch is the CEO and Principal Engineer of Biomedtech Australia Pty Ltd, a company he founded in 1998 to design and manufacture normobaric hypoxia training systems used by military and civil aviation organisations worldwide. With a background in electronic and biomedical engineering, Oleg has spent over 30 years developing precision physiological training technologies that simulate high-altitude flight conditions under normobaric conditions. His work bridges respiratory physiology, aviation medicine, and embedded systems design. GO2Altitude systems are used not only for hypoxia familiarisation, but also for advanced simulator-based training and investigation of in-flight physiological events. Oleg is the original designer of the GEN3 hypoxicator—an integrated system capable of reproducing the dynamics of modern oxygen regulators while measuring key respiratory parameters in real time. He is committed to advancing aviators safety through innovation and education in altitude physiology.

Since first presenting the concept at the ASAM Conference in 2005, GO2Altitude® (Biomedtech Australia Pty Ltd) has led the continuous development of normobaric hypoxia training systems—commonly known as hypoxicators—as a cost-effective, accessible alternative to traditional hypobaric chamber training. Originally deployed as fully computerised, classroom-based systems, GO2Altitude® technology provided a mask-based hypoxia experience that objectively demonstrated neurocognitive performance deterioration through a repeatable battery of subtests. These systems have since been adopted by military and civil aviation organisations, including the RAAF, Spanish Air Force, RFDS, and other organisations worldwide.

Over the past two decades, the respiratory subsystem has evolved from basic “breathing from a Douglas bag” setups into today’s advanced GEN3 hypoxicator—a fully integrated physiological training platform capable of realistically emulating the breathing sensations of

any aircraft oxygen regulator. The latest GEN3 system is designed for seamless integration into full-flight simulators, enabling both individual and crew-based training sessions under the supervision of a single aviation medical officer. This configuration allows hypoxia and "physiological episode" scenarios to be safely simulated within the operational cockpit environment, significantly enhancing realism and training effectiveness.

The GEN3 system provides precise control of inspired oxygen concentration, inhalation flow, and exhalation pressure (mask cavity pressure), thereby replicating characteristics of modern on-demand oxygen regulators. Embedded sensors and software continuously measure minute ventilation, tidal volume, respiratory rate, airway pressure, and the inhalation/exhalation ratio. A robust, motion-tolerant SpO_2 monitoring system enables hands-free operation—essential for in-simulator use.

Beyond its role in training, the GEN3 system offers diagnostic and investigative capabilities that may assist in uncovering the underlying causes of unexplained physiological episodes (UPEs).

This presentation will outline key engineering milestones, highlight operational deployments, and discuss the expanding role of GO2Altitude® systems in improving aviation safety and advancing understanding of altitude physiology and hypoxia.

1315 – 1435 (SESSION 5)

SESSION 5: SWEATING THE SMALL STUFF

How Low Can You Go? Evaluating the Physiological Feasibility of Low-Pressure Suits for Martian EVAs | Dr Gordon Cable

Dr Cable is a Specialist in Aerospace Medicine and a Fellow of the Australasian College of Aerospace Medicine. He is co-founder and Head of Flight Medicine with Human Aerospace Pty Ltd and had a long-standing role with the RAAF Institute of Aviation Medicine in Aerospace Medicine Training. Professor Cable was Space Medicine and Life Sciences Lead on secondment from RAAF at the Australian Space Agency 2020 – 2021 and in 2023 was appointed Professor in the Practice of Space Medicine at Australian National University. He holds multiple Fellowships of professional aerospace organisations in Australia and internationally including the Aerospace Medical Association, the International Academy of Aviation and Space Medicine, the Australasian Society of Aerospace Medicine and the Royal Aeronautical Society. in 2015 he was appointed a Member of the Order of Australia for contributions to aerospace medicine.

Based on operational experience from the Apollo program and astronaut recommendations, a NASA publication has previously recommended Extravehicular Activity (EVA) suit pressures as low as 20.67 kPa (3.0 psi; 155 mmHg), equivalent to an altitude of approximately 38,000 ft under International Standard Atmosphere (ISA) conditions. Lower suit pressures are desirable to enhance mobility and reduce metabolic workload during EVA, as higher pressure differentials can significantly impede joint movement and dexterity.

However, optimizing suit pressure involves a critical trade-off between operational functionality and physiological risk. Two primary medical concerns at reduced suit pressures are hypobaric hypoxia and decompression sickness (DCS), both of which can threaten crew health and mission success.

This paper evaluates the physiological feasibility of various EVA suit pressure levels in the context of future human missions to Mars. The analysis assumes a Martian surface operational environment—habitats and rovers—maintaining a proposed Exploration Atmosphere (EA) of 56.5 kPa (8.2 psi; 424 mmHg) with an inspired oxygen fraction (FiO_2) of 0.34. We examine the physiological thresholds and risks associated with different suit pressures under these conditions and provide recommendations for balancing mobility and safety in Martian EVA operations.

Physiological Effects of Commercial Suborbital Spaceflight: A Centrifuge-Based Research Program | Professor Thomas Smith

Prof Tom Smith MBBS DAvMed DPhil (Oxon) FRCA FANZCA FRCP FRAeS

Prof Smith is a clinician-scientist specialising in aerospace medicine, anaesthetics and hyperbaric medicine. He spent over 20 years in the UK pursuing a clinical academic career in Oxford and then at King's College London, where he led aerospace medicine research and was Professor of Aerospace Medicine prior to relocating to Adelaide in 2024. Tom has undertaken studies in many challenging environments including high-G human centrifuges, parabolic 'zero-G' flights, commercial airline flights, altitude chambers and hypoxia facilities, and at high altitude in the mountains of Peru. He is Clinical Professor at Adelaide University, Visiting Professor of Aerospace Medicine at King's College London, and Honorary Professor of Aerospace Medicine at ANU. Tom is a former Rhodes Scholar and Churchill Fellow and had the honour of giving the John Lane Oration at the 2019 ASAM Conference in Sydney.

Background:

The advent of commercial suborbital spaceflight operations represents a historical inflection point for private citizens travelling to space. Close to 100 people have now flown with Blue Origin and Virgin Galactic, and there are parallels between the industry's development and the early beginnings of air travel last century. Air travel ultimately transformed the world, and suborbital spaceflight likewise has the potential to revolutionise global transportation with even faster point-to-point travel (e.g. Adelaide-London < 2 hours). However, suborbital flights present greater physiological challenges than air travel, including significant high-G acceleration during launch and re-entry that combines +Gx (chest-to-back) and +Gz (head-to-foot) acceleration. There is a growing clinical and regulatory requirement to understand how suborbital spaceflight affects our physiology, and we have recently undertaken a series of studies investigating the high-G launch/re-entry phases as a collaboration between King's College London, the UK Civil Aviation Authority, the Royal Air Force and QinetiQ.

Overview:

We investigated key physiological responses using two centrifuges: QinetiQ's legacy centrifuge at Farnborough and the RAF's state-of-the-art High G Training and Test Facility at

RAF Cranwell. These studies included detailed physiological measurements during dynamically simulated suborbital profiles, and demonstrated profound cardiovascular and respiratory responses with occasionally pronounced hypoxaemia. We also observed frequent visual G symptoms (greyout) and one episode of G-induced loss of consciousness (G-LOC), and established that the muscle tensing component of an anti-G straining manoeuvre (i.e. tensing leg/abdominal muscles) largely, but not completely, prevented this greyout.

Discussion:

Centrifuge-simulated suborbital spaceflight provokes marked physiological effects. While these are likely to be benign for most individuals, a minority could be susceptible to adverse cardiopulmonary effects, especially in the presence of pre-existing medical conditions. These results have implications for pre-flight medical assessment and are informing the development of medical standards as part of a regulatory framework for suborbital spaceflight.

Keynote Presentation: Are we thinking about weightlessness the right way? | Dr Jay Buckey

Professor of Medicine, Director of the Space Medicine Innovations Laboratory at Dartmouth College and former NASA physician astronaut

The conventional way of thinking about weightlessness as primarily a response to a head-ward fluid shift isn't working well to explain some of the unique effects of weightlessness. The visual changes astronauts experience and the formation of jugular vein clots in space have defied easy explanation. This talk will discuss the unique effects weightlessness has on physiology and how these effects might help explain the clinical changes seen in space.

SUNDAY 21 SEPTEMBER 2025

0830 - 1230

CASA SESSIONS

Dr Kate Manderson

Dr Kate Manderson started her career in aerospace medicine in 2001 as a junior Medical Officer with the Royal Australian Navy. She completed her postgraduate studies through King's College London and the RAF, and went on to become a Foundation Fellow of the Australasian College of Aerospace Medicine. Dr Manderson is also a Specialist General Practitioner, Fellow of the Royal Aeronautical Society and the Aerospace Medicine Association. Having almost completed two terms as President of the Australasian Society of Aerospace Medicine, Dr Manderson is now looking forward to even more opportunities as PMO to work with DAMEs and the aviation industry and community. On the rare occasion she is not at work, Dr Manderson might be found either somewhere snowy or somewhere beachy, with her husband and two daughters.

This year, our CASA sessions will take a new direction. As well as case study discussions using newly-developed clinical practice guidelines, we'll be taking an in-depth look at the Examiner Handbook – Complete Revision, 6th Edition (2025). Join CASA PMO Dr Kate Manderson as she unpacks the updates, explores key changes, and provides valuable insights to help you navigate the latest updates with confidence.