

DHSS Program - 29th November

0845 0900	-	Welcome – Dr Nick Beagley, Research Leader Land Human Systems and Professor Chris Moran, Deputy Vice-Chancellor Research
0900 0940	-	Opening Keynote Address Going Deep with Robots: Undersea Warfighting in the 2040s CDRE (Ret'd) Steve Davies
0940 – 1000		Morning Tea
Session 1 – CHAIR - Chris Best: Human Systems Integration: Autonomy		
1000 1020	-	Kate Devitt. Design Principles for Lethal Autonomous Weapons Systems [2]
1020 1040	-	Madeleine Krastev and Philip Temby. Exploring the Cognitive Aspects of Human-Autonomy Teaming in the Land Domain: A Scoping Review [4]
1040 1100	-	Cassandra Heffernan, Susan Cockshell and Anna Ma Wyatt. The Effect of Swarm Image Integration on Human Performance and Workload in the Maritime Domain [41]
1100 1120	-	Shayne Loft, Brittany Lock, Adella Bhaskara, Michael Skinner, James Brooks, Helen Pongracic and Jason Bell. Human-Autonomy Teaming in the Management of Unmanned Vehicles: The Effect of Automation Transparency and Mission Stakes [29]
1120 1140	-	Vanessa Bowden, Drew Butson, Natalie Griffiths and Shayne Loft. Supervising Highly Reliable Automation - Effects of Instructed Reliability on Detection of a Single Failure in Air Traffic Control [34]
1140 1200	-	Udo Boehm, Dora Matzke, Matthew Gretton, Spencer Castro, Joel Cooper, Michael Skinner, David Strayer and Andrew Heathcote. Real-time prediction of fluctuations in cognitive workload [42]
1200 – 1300		Lunch
Session 2 – CHAIR - Phil Temby: Human Performance Measurement		
1300 1320	-	Anthony Leicht, Wade Sinclair, Kenji Doma and Paul Bowman. Weekly Heart Rate Variability Recordings Can Predict Physical Performance [8]
1320 1340	-	Kingsley Fletcher, Megan Bartlett, Susan Cockshell and Jason McCarley. Visualising Probability of Detection to Aid Sonar Operator Performance [3]
1340 1400	-	Andrew Hunt, Ian Stewart and Daniel Billing. What does it mean? Interpreting data from wearable technologies for monitoring physiological strain [38]
1400 1420	-	Matthew Palmer, Ashlee Turner, James Sauer and James Fell. Effects of Acute Physical Exercise on Metacognition [43]
1420 – 1500		Poster Session & Afternoon Tea
Session 3 – CHAIR - Ross Coad: Human Performance: Food and Nutrition		
1500 1520	-	Katie Tooley and David Crone. The microbiome and the soldier: Can it be manipulated to enhance cognition (A Review)? [11]
1520 1540	-	Julia Carins, Sharyn Rundle-Thiele, Anna Kitunen and Di Robertson. Skilling and supporting: Enhancing healthy eating behaviours in early career personnel [17]
1540 1600	-	Anna Kitunen, Julia Carins and Sharyn Rundle-Thiele. Encouraging healthy eating in The Australian Defence Force: A segmentation approach [20]
1600 1620	-	Jeanine De Diana, Roger Stanley and Rosa Peterson. Functional High Energy Bar for Physical and Cognitive Performance [21]
1620 1640	-	Lan Bui, Roger Stanley, Ross Coad and Amir Ghandi. Future Defence Feeding Systems Enabled by Rapid Microwave Processing [35]
1930 – 2200		Conference Dinner: Including Keynote MAJ Sally Graham

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0830		Welcome – Overview – David Crone
Session 4 – CHAIR – Susan Cockshell: Cognitive Performance: From Perception to Decisions		
0840 0900	–	Joseph Calleja, Benjamin Hoggan and Philip Temby. Psychological Predictors of Military Decision-Making Performance on Tactical Planning Exercises [7]
0900 0920	–	Maria Gavrilescu, Renee Karas, Amanda Douglass, Larry Abel and Peter Gibbs. Establishing tolerance limits for optical misalignment in night vision binocular devices based on task performance and physiological markers of fatigue [15]
0920 0940	–	Andrew Lawrence, Eugene Aidman, Kim Felmingham, Ellie Lawrence-Wood and Alexander McFarlane. Neural response discrimination between threat and non-threat stimuli is reduced in combat-exposed military personnel: Event-related potential (ERP) evidence from the MEAO prospective study cohort [16]
0940 - 0945		Short Break
0945 1005	–	Alex Chatburn, Maarten Immink, Diane Pomeroy, Bruce Thomas, Ina Bornkessel-Schlesewsky, Matthias Schlewsky, Javaan Chahl and Mark Bilinghurst. Adaptive virtual reality cognitive training based on real time alpha power measurement [18]
1005 1025	–	Shahd Al-Janabi and Larissa Cahill. Making the unseen seen: Using the perceptual and cognitive sciences to guide augmented-reality design [19]
1025 1045	–	Angela Bender, Shayne Loft, Ottmar Lipp, Vanessa Bowden, Susannah Whitney and Troy Visser. Situation Awareness Mediates the Relationship between Working Memory Ability and Performance on the Air Traffic Control Task [24]
1045 – 1105		Morning Tea
Session 5 – CHAIR – Sam Huf: Defence Focused – Resilience and Fatigue		
1105 1125	–	Joslyn Mak, Wesley McTernan and Jiangjun Tang. Job Demands–Resources (JD-R) as predictors towards the experience of fatigue in the Australian Defence Force (ADF) pilots and maintainers [9]
1125 1145	–	Alexandra Boeing, Belinda Cham, Karina Jorritsma and Mark Griffin. Developing a measurement protocol for the submarine environment: a case study on exploring submariner endurance [36]
1145 1205	–	Sabina Kleitman, Eugene Nalivaiko, Matthew Blanchard, Simon A Jackson, Nikzad Babaii Rizvandi and Eugene Aidman. Relationship between Biometrics and Simulation-embedded Performance Markers Assessing Individual Differences in Resilience and Adaptability [27]
1205 – 1300		Lunch
Session 6 – CHAIR – Susana Whitney - Human Performance: Teams		
1300 1320	–	Matthew Blanchard, Sabina Kleitman, Simon Jackson, Nikzad Babaii Rizvandi and Eugene Aidman. Team similarity profiles: Is psychological similarity associated with team performance? [26]
1320 1340	–	Michael Chapman, Philip Temby and Daniel Gucciardi. Measuring Team Role Preferences and Perceptions of Team Resilience in Australian Army Personnel [30]
1340 1400	–	Philip Temby, Ben Hoggan, Michael Chapman and Daniel Gucciardi. Examining Team Role Preference and Team Performance in a Military Population [25]
1400 1420	–	Steph Michailovs, Stephen Pond, Megan Schmitt, Jessica Irons, Matthew Stoker, Troy Visser, Sam Huf and Shayne Loft. Exploring Fundamental Issues of Team Performance in a Submarine Control Room Use Simulation Environment [39]
Panel Discussion		
1420 1520	-	Discussion: Minders, Mentors, Minions or Mates – Warfighter roles in Future Complex Systems Chair: Eugene Aidman (PARTICIPANTS: To be confirmed)
1520 1530	–	Symposium Close & Awards: David Crone