



UNSW
CANBERRA

Values in Defence & Security
Technology Group

INTERNATIONAL CALL FOR ABSTRACTS

1st TEMPER workshop

Training Enhancement and Military PERFORMANCE

13-14 February 2020
University of New South Wales at
Australian Defence Force Academy, Canberra

Updates: www.unsw.adfa.edu.au/conferences/TEMPER

Info: m.cappuccio@unsw.edu.au



The [Values in Defence and Security Technology group \(VDST\)](#) invites researchers and professional practitioners to submit abstracts to the inaugural TEMPER workshop dedicated to cognitive enhancement and human performance in military training. The workshop will be held on 13-14 February 2020 at [University of New South Wales at Australian Defence Force Academy in Canberra](#).

TEMPER is designed to transfer scientific expertise, training & preparation methods, and technological know-how among academics and practitioners working for the military and the sports industry. As excellence in military training importantly draws on psychological methods, sophisticated cognitive models, and technological innovations, the workshop focuses on the improvement of the warfighter's skills and cognitive abilities through training, exercise, and augmentation.

CONFIRMED SPEAKERS*

Damian Birney (Cognitive and Individual Differences Training Lab, University of Sydney)
<https://sydney.edu.au/science/about/our-people/academic-staff/damian-birney.html>

Monique Crane (CEPET, Macquarie University)
<https://researchers.mq.edu.au/en/persons/monique-crane>

Steve Fiore (Cognitive Science Laboratory, University of Central Florida)
<https://csl.ist.ucf.edu/People.aspx>

Gerald F. Goodwin (U.S. Army Research Institute, Fort Belvoir)
https://www.researchgate.net/profile/Gerald_Goodwin

Daniel D. Hutto (Minds in Skilled Performance, University of Wollongong)
https://scholars.uow.edu.au/display/daniel_d_hutto

Jesús Ilundáin-Agurruza (Philosophy Department, Linfield College)
<https://www.linfield.edu/philosophy/faculty.html>

Michael D. Kirchhoff (Minds in Skilled Performance, University of Wollongong)
https://scholars.uow.edu.au/display/michael_kirchhoff

Ian Langford (Future Land Warfare, Army Headquarters)
<https://www.army.gov.au/brigadier-ian-langford-dsc-and-bars>

Nadine Marcus (School of Computer Science, University of New South Wales)
<https://research.unsw.edu.au/people/associate-professor-nadine-marcus>

Rich Masters (School of Health, Waikato University)
<https://www.waikato.ac.nz/staff-profiles/people/rmasters>

Kenneth Murray (Armiger Police Training Institute)
<http://www.theppsc.org/Staff/Murray/Ken.htm>

Gert-Jan Pepping (School of Behavioural & Health Sciences,
Australian Catholic University)
<https://rexr.acu.edu.au/framework/browse.php?srperid=6480>

Miriam Reiner (Virtual Reality and Neurocognition Lab, Technion and Stanford University)
https://www.researchgate.net/profile/Miriam_Reiner

Darcy Schnack (Center for Enhanced Performance, U.S. Military Academy at Westpoint)
https://westpoint.edu/center-enhanced-performance/profile/darcy_schnack

*Last updated: 5 November 2019.



THEMES

Four thematic areas will be prioritized in the panel discussions and parallel sessions:

- (1) Enhanced skill acquisition methods;
- (2) Performance under pressure and resilience;
- (3) Situational awareness and decision under risk;
- (4) Team performance optimization and analysis (including human-agent teams).

TOPICS

TEMPER primarily focuses on military applications. The speakers are encouraged to link their presentations to scientific advances in sport & performance psychology and embodied cognition theory. Topics include but are not limited to the following:

- Analytics and quantitative methods in human performance
- Augmented reality and holographic goggles
- Biological and neuronal markers
- Bio and neurofeedback-based accelerated training techniques
- Communication in special operations
- Extended perception through sensors and sensory-substitution/integration
- Flow states and motivation
- Fluid intelligence and cognitive performance assessment methods
- Human-robot interaction and coordination
- Infantry tactical coordination
- Long-term concentration and focus techniques for radar personnel
- Marksmanship: high performance and improved training
- Martial arts and combat techniques
- Mental flexibility and decision under uncertainty
- Mission preparation in digitally simulated scenarios
- Moral injury and burnout
- Multi-task coordination
- Nutrition and cognitive performance
- Performance under pressure and fear management
- Post-traumatic stress
- Proprioceptive feedback in prostheses and exoskeletons
- Quiet eye and visual attention in air force pilots
- Resilience
- Selection of military personnel based on cognitive skills and aptitudes
- Situation awareness and enhanced perception
- Skill acquisition and automatization
- Team cohesion, morale and self-efficacy
- Technologies for cognitive and physical enhancement
- Telepresence and simulated bodies in military operations
- Underwater missions' psychophysical preparation
- Warfighter's deontology, between ethics and psychology

ABSTRACT SUBMISSION

We encourage researchers and practitioners to submit a 350-700 word abstract for consideration. Presentations will be organized into thematic sessions. Abstracts must be submitted on-line through the TEMPER website by 31 December 2019:

<https://www.unsw.adfa.edu.au/conferences/TEMPER>

Only if the submission webpage is unavailable, send your abstract to:

m.cappuccio@unsw.edu.au

Notification of acceptance will be communicated by 7 January 2020.

REGISTRATION

Registration is now open and closes on 31 January 2020. Registration incurs a fee of \$80 for each of the two days of the workshop. The concessionary fee (\$40 per day) is available to university students and members of the Armed Forces. Registration fee is waived for students and faculty members of ADFA and UNSW. The social dinner on 13 February 2020 is optional and incurs an additional \$85 fee. Fees must be paid online before the beginning of the workshop. To register, please use the registration link available in the TEMPER website:

<https://unswcanberra.eventsair.com/temper-workshop-2020/register/Site/Register>

VENUE

The workshop's venue is Adams Auditorium, Australian Defence Force Academy (ADFA) campus, Northcott drive, Campbell ACT 2612. ADFA campus is located only 10 minutes from Canberra airport and 5 minutes from the Australian War Memorial. Access to WiFi is available on site. A map of directions to Campus and the Campus map can be found here:

<https://www.unsw.adfa.edu.au/about-us/our-campus/location>

SOCIAL DINNER

The dinner will be held at The Promenade Café - Hyatt Hotel Canberra, on 13 February 2020, starting 6pm. Registration is mandatory and incurs a \$85 fee.

<https://www.hyatt.com/en-US/hotel/australia/hyatt-hotel-canberra-a-park-hyatt-hotel/canbe/maps-parking-transportation>

ACCOMMODATION

Numerous hotels and motels are available at driving distance from ADFA campus, either in Canberra (5-minute drive) or Queanbeyan (15-minute drive). Early reservation is recommended as hotels in Canberra city centre are expected to be heavily booked due to the scheduled sittings of the Australian Parliament.

FURTHER INFORMATION

For further information about the workshop please contact Dr Max Cappuccio (m.cappuccio@unsw.edu.au).



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TEMPER is brought to you by Values in Defence and Security Technology (VDST) group
<https://www.unsw.adfa.edu.au/school-of-engineering-and-information-technology/vdst>