



The Australasian College of Physical Scientists and Engineers in Medicine

Suite 808 | 35 Spring St | Bondi Junction, NSW, 2022 | Australia

CEO UPDATE

Dear Neva

I'm pleased to issue this month's edition of the ACPSEM newsletter - the final for this year.

I enjoyed meeting many of you at the EPSM in Melbourne recently and was very impressed with the quality and variety of speakers, and passion for innovation amongst attendees. Most of all, I valued being able to speak with many of you to hear your thoughts about the state and future of the College.

I would like to lend my additional congratulations to the Award winners, and to again thank Cathy Barbagallo and the whole organising committee for the

exceptional EPSM program.

The Summer School is always popular and this year was no exception. The highlight this year was an inter-specialty event at Peter MacCallum Cancer Centre, with the ROMPs and Diagnostic Imaging community combining to provide a tailored program on image quality. More about the Summer School below.

Thank you to those who participated in our AGM on the 11th of December and congratulations to the elected Board members.

As always, a huge thank you for the hard work of all our TEAP coordinators, branch, working group and committee members who contribute their time to the College.

Please contact me directly with any opportunities or issues I can help you with at di.robinson@acpsem.org.au.

Have a safe and happy holiday season and I look forward to working with you all in 2025.



Di Robinson
CEO ACPSEM

EPSM 2024 Highlights



With planning a year in the making, the annual EPSM was held in Melbourne over the 17 - 20 November at the Grand Hyatt. This year, for the first time since 2012, we combined the meeting with Engineers Australia to include their annual biomedical engineering meeting (ABEC).

To open the conference, our first speaker, Bijan Elsahi, spoke on Risk Management in Medical Devices by drawing us in with a story centred on highlighting the importance of providing the best care possible for all patients and consumers. With this focus on how we can "Shape the Future" with our work, so began three very full days of presentations, workshops and posters. The range of talks this year was impressive and we are particularly proud of the highly engaging session on the global outreach that physicists are providing across the globe, and the increasing uptake of AI in all our fields.

No conference is complete without the opportunity to socialise! The conference started off strong with the opening night drinks, but the annual APSIG trivia night is quickly becoming the hottest ticket in town. As always, the compere, Simon Downes, provided an excellent evening of entertainment, in aid of funding activities in the region. Apparently, the team to be on is any team including Claire Dempsey, who has won two years in a row. The conference dinner was truly a night of glitter and sparkles with the amazing band, wonderful food, hilarious photo booth, and some very questionable dancing (Andy Cousins - your invitation for Dancing with the Stars is in the mail!).

The brave souls who did the fun run the morning after the gala dinner are the true champions. While the final closing honoured the excellent work judged by attendees, all the presentations and posters at this year's event deserve to be acknowledged. Without our wonderful members, there is no EPSM. Thank you to our sponsors for being supportive and genuinely excited to be a part of our conference.

Cathy Barbagallo

Chair, EPSM Organising Committee



TEAP Coordinators

L to R: Mike Bailey, Claire Dempsey, Cathy Barbagallo, Alicia Moggre, Deborah Carrick, Steven Harvey

Q&A: The Art of Organising a Successful Conference

ACPSEM's Neva Law sat down with Cathy Barbagallo, Chair of the EPSM Organising Committee, to ask what it takes to organise a successful conference.

Neva - What's the secret to organising a successful conference?

Cathy - Surrounding yourself with an effective and motivated team is key.

For EPSM, we are fortunate to have the long-term support of The Conference Company, who understands us and our conference. Having an excellent relationship with the conference management group has been fundamental in keeping things on track, on budget and not too overwhelming!

What's the best way to give attendees a voice and create space for interaction and enhance their learning experience?

I encourage people to attend and ask the speakers questions! If the session feels too confronting, approach people in the breaks. I have had some meaningful interactions with speakers while sipping coffee at morning tea, where everyone might be a little more relaxed. Our international guests, as well as local experts, are always so excited to talk and share with attendees.

What are the advantages of teaming up with Engineers Australia and how have the conferences changed over the years?

EPSM has a long history, but we have not had a combined conference with EA for over 12 years. This year provided a lead-up to future events with the Biomedical Engineers who do work adjacent to medical physicists in many departments. This year's content also provided an opportunity to combine our shared concerns for Risk Management and ensuring quality outcomes for patients.

What are the key contributions and achievements of the conference in today's rapidly evolving landscape and how does it assist participants' understanding of current trends and practices?

This year we wanted to highlight the current studies and practices that will lead us forward into the future - thus the theme "Shaping the Future". We have an increasing number of presentations on work based in AI and machine learning which touches all disciplines in medical physics and engineering.

When is the next EPSM conference and where will it be?

Next year, EPSM will be taking a break while we have the IUPSEM World Congress in Adelaide! I encourage you to go to the website to register and to keep in touch with what's going on. The event is slightly earlier in the year

than EPSM, so get started on those ideas for abstracts. It will be a huge and exciting event, with an enormous number of presentations on offer. The usual EPSM will be back in 2026 - better than ever I am sure.

ESPM Speaker Highlight

Strength in differences: A manager's perspective on why we need DEI

The ACPSEM Diversity, Equity and Inclusion Special Interest Group (DEI SIG) was formed to shine a light on how we can embrace diversity and enhance inclusivity which, in our industry, can only lead to enhanced patient care.

When people think of diversity, they often think of gender, age, culture, religion or sexual orientation etc. As a manager in Radiation Oncology Medical Physics, none of these matter. What is important is the ability to perform the work that's required and to work well within a multidisciplinary team. This is where diversity shines, in building a strong team that tackles projects and problems head-on and smashes through them.

All of us are the product of years of unique experiences, and harnessing those differences brings together a collective wisdom which wouldn't exist if we all thought the same way. Understanding how everyone has different needs, which can change through different stages of their lives, is an important part of ensuring equity as a manager.

During the conference, I was fortunate to speak to people about their thoughts on DEI and I found that many conversations centred around the equitable treatment of team members, a good work-life balance, and physical and mental wellbeing. Importantly, good leadership was often cited as the defining factor for a psychologically safe work environment.

I presented my experience with DEI as a manager during the Diversity and Collaboration session. The panel at this session comprised David Waterhouse, Chief Physicist GenesisCare WA, Ben Cooper, Chief Physicist Canberra Health Services, and I, and we agreed that one of the most

important skills we need to display as leaders is listening: ensuring our teams feel heard and that equity is of far more value than equality.

May Whitaker, Head of Physics and Engineering/Deputy Director of Radiation Oncology

Chris O'Brien Lifehouse

2024 ACPSEM Awards

The 2024 ACPSEM Awards were announced at the Conference Dinner on Tuesday 19 November. Congratulations to all award winners on their hard work and dedication. The award winners were judged independently over the three days at the conference:

- Innovation and Future Impact (matching the conference theme) - Jacinta Yap
- Improving Patient Care or Outcomes - Danielle Chrystall
- Best Overall Oral Presentation - Youssef Ben Bouchta
- Best Student/Registrar Oral - Joel Noble
- Best Student/Registrar Poster - Jack Svenson
- Best Poster - Rik Nezich
- Judges Choice - Hooryia Bajwa
- Shay Payne Memorial Award for work involving AI Robert Finnegan

The Victorian/Tasmanian Branch is pleased to sponsor the Shay Payne Memorial Award which recognises Shay's passion for AI. Shay was a young DIMP in Victoria who we lost suddenly this year. In honour of Shay, the Victorian/Tasmanian branch has introduced this ongoing award for excellence in work using AI.

- Boyce Worthley Young Achiever Award - Joel Poder
- Richard Bates Travel Award - Sankar Arumugam
- PhD Award - Jake Kendrick
- Lyn D. Oliver Excellence in Clinical Translation Award - Jeremy Booth

A huge thank you to the Awards Committee: Cameron Storm (Chair), Paul White, David Thiele, George McGill, Matthew Murray and Regina Bromley.

Photography in Medical Physics Calendar / Photography Award

The 2024 Photography in Medical Physics Awards presented awards to winners in three categories of professional voting (General, Shaping the future and AI) and public voting.

The winners were ...



General Winner

Corey Bridger, Michael Douglass

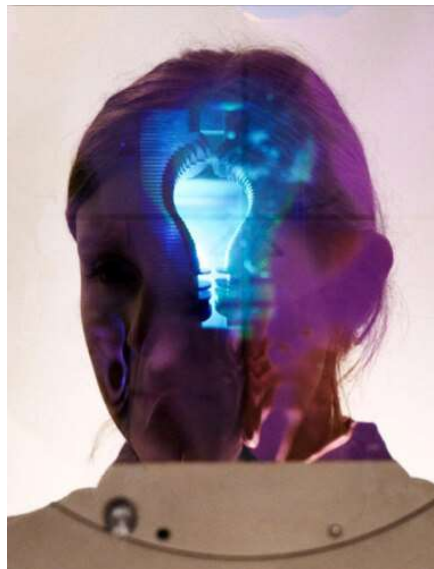
A Tree Among The Forest 2



AI Winner

Geoff Smart

The Art of Physics



Shaping The Future Winner

James Rijken

The Future Is Shaped By Ideas

James Rijken also won the People's Choice Award with *The Future Is Shaped By Ideas*

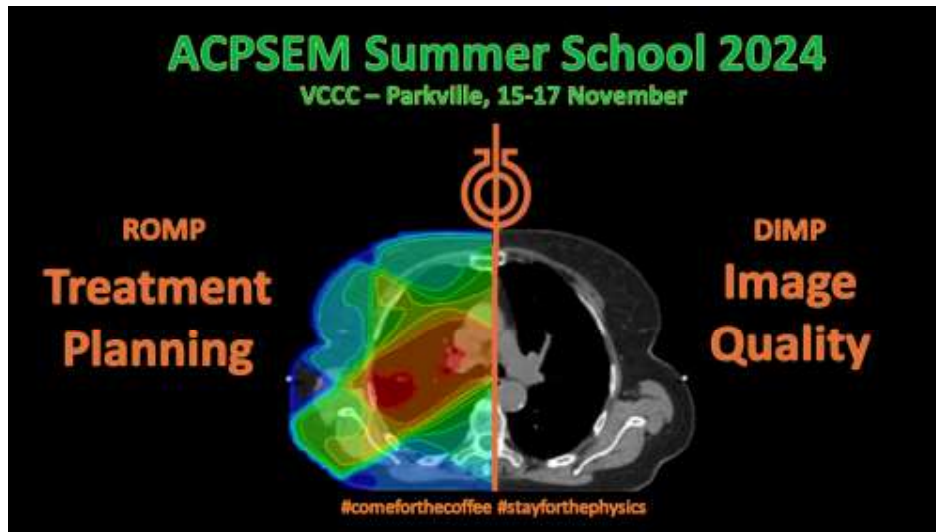
The 2025 Photography in Medical Physics Calendar is available featuring images from the 2024 Photography in Medical Physics competition.

Proceeds of the sale go to Asia Pacific Special Interest Group.

The calendar is available on the College website.

[VIEW CALENDAR](#)

ACPSEM Summer School 2024



Radiation Oncology Stream - External Beam Radiation Treatment Planning Conference Report

The ACPSEM Summer School 2024, held at the prestigious Peter MacCallum Cancer Centre, provided an exceptional learning and networking platform for registrars in Radiation Oncology Medical Physics (ROMP). The two-day event was a confluence of innovation, clinical expertise, and multidisciplinary collaboration, offering an in-depth exploration of cutting-edge advancements in radiation oncology treatment planning.

Day 1: Bridging Theory and Practice

The opening day commenced with a warm welcome from tireless Summer School and EPSM Conference organiser\TEAP coordinator, Cathy Barbagallo, setting an inviting tone (registrars were ducking confectionary missiles) for the day. The program covered a wide range of topics pivotal to treatment planning and clinical trials:

- Principles of Treatment Planning: Dr. Tomas Kron shared foundational insights, emphasising best practices and emerging technologies in radiation oncology
- Clinical Case Studies and RTP for Neuro-Oncology: Dr Claire Phillips
- Gamma Knife Planning: Atousa Montaseri highlighted personalised approaches in radiation therapy

- Dr Nick Hardcastle discussed Physics Role in Clinical Trials
- Limitations in Developing a Treatment Plan were outlined by Giulia McCorkell and Kevin Tu
- Multidisciplinary Planning Reviews: A breast case study review of registrar-submitted plans using ProKnow led by Dr Janice Yeh, Daniela Romao, and Michael Bailey illustrated the collaborative decision-making process and treatment planning challenges for breast and nodal volumes.
- Dr Vanessa Panettieri discussed using AI, templates and training plans with highlights from her experience with Rapid Plan
- Dr Greg Wheeler discussed Clinical Case Studies and RTP for Paediatric Oncology providing some touching insights in patient journey and experience.

Attendees found the session on "Proton-to-Photon Comparative Planning for Paediatric Patients," presented by Scott Penfold and Alexandre Santos, particularly engaging. It underscored the potential of PENTEC NTCP radiobiological models in optimising paediatric care.

Day 2: Practical Applications and Innovations

Day two shifted focus to practical applications and advanced techniques:

- CT Simulation and Motion Management: Paula Fotinopoulos and Neil Wallace captivated participants with insights into the initial stages of the patient journey and strategies to mitigate patient motion
- Non-CT-Based Planning: Reza Alinaghi and Leah McDermotts session was a highlight, offering innovative approaches to planning in the absence of CT imaging using MRI only
- Pauline Rose shared a fascinating account of the role and evolution of nursing in radiotherapy
- Jack Moller demonstrated in real time the challenges in developing a Head and Neck plan
- Our international guest speakers were the highlights for all of the participants
- Professor Eric Ford delved into the crucial role of physics in treatment plan verification and risk management
- The effervescent Dr Eliana Vasquez Osorio discussed the challenges and difficulties faced in treatment planning when considering reirradiation.

The Summer School was taken out with the Algorithm Cage Match Monte Carlo vs. The Rest: Nick Hardcastle and Jessica Lye brought an entertaining yet deeply technical discussion, examining the strengths of various algorithms in treatment planning. Nick proved the victor over a very valiant Jessica in a match for the ages.

Diagnostic Imaging Stream Conference Report

The ACPSEM Summer School 2024 for the Diagnostic Imaging Stream brought together registrars and experts for a dynamic and intensive exploration of this years topic: Image Quality.

Held alongside the ROMP Summer School at the Peter MacCallum Cancer Centre, this event offered a unique opportunity for registrars to engage with the faculty on complex topics in diagnostic imaging.

Registrars from nuclear medicine and radiology disciplines nationwide joined a nearly equal number of speakers, including several medical physicists, radiologists, software specialists, nuclear medicine technologists, and sonographers. The highlight of the speaker faculty was EPSM keynote presenter Dr A. Kyle Jones, who travelled from Texas, USA, to share his expertise. Together, the speakers delivered thought-provoking insights into image quality issues that registrars rarely encounter in routine practice.

The two days of lectures provided a comprehensive dive into quality topics across the diagnostic imaging spectrum. Highlights included clinical perspectives such as "guess that artifact," practical tips for automating quality practices with software, and cutting-edge developments like whole-body PET imaging and the latest testing standards for modality apparatus and monitor performance. This multidisciplinary approach ensured the event was as educational as it was engaging.

The Summer School extended into a third day of hands-on workshops at the state-of-the-art Royal Childrens Hospital. Registrars worked in small groups with expert mentors on diverse practical exercises, choosing from six topics such as Quantitative SPECT and cone beam dental imaging. This practical component allowed participants to directly apply their learning in real-world contexts, enhancing the value of the experience.

Summer School organiser Amanda Perdomo introduced a light-hearted "match-the-physicist" game to foster interaction, encouraging registrars to engage with subject-matter experts. The overwhelming success of the event was reflected not only in the high-quality presentations but also in the enthusiasm of participants, many of whom arrived early and stayed engaged throughout the weekend. Notably, expert speakers commented on the exceptional quality of the presentations, underscoring the event's value to all attendees.

Feedback from registrars is eagerly anticipated to refine future Summer Schools further. This year's program has set a high benchmark for future events, thanks to the dedication and expertise of the speakers who volunteered their time over the weekend.

Thank you to all the expert speakers for their invaluable contributions to the DIMP learner community. Your efforts have left a lasting impact and are deeply appreciated.

Key Takeaways and Reflections

The Summer School was an enriching experience, blending expert-led discussions with case-based learning and hands on practical exercises. Attendees appreciated integrating traditional methods with innovations like AI in image quality, radiotherapy treatment planning and adaptive radiotherapy techniques. The collaboration across disciplines, from physicists to oncologists, nurses and therapists, radiologists and software specialists, nuclear medicine technologists and sonographers underscored the holistic nature of patient care.

The event reaffirmed the importance of ongoing professional development and highlighted the pivotal role MPs play in diagnostic imaging and advancing cancer care. Including practical demonstrations and discussions on global standards and safety added immense value, equipping attendees with actionable insights to enhance their clinical practice.

For future events, attendees expressed interest in longer panel discussions and hands-on workshops to deepen their understanding and foster greater collaboration.

The ACPSEM Summer School 2024 was not just an educational event it was a testament to the commitment of the Medical Physics community to innovate

and improve healthcare outcomes.

Clinical Governance Modules

The ACPSEM Clinical Governance Course, consisting of 3 self-paced modules, will be available next month. All the information you need will be contained in a brochure on the College website online, including a summary of module content, estimated time required to complete, CPD points that can be claimed, and course costs. You can complete 1,2 or all three modules according to your needs and interests. The modest cost structure reflects that development was funded by the Australian Government.

The reflection-based tasks are challenging and will be assessed, with feedback given. The content will be new to many, and for others, provide a means of documenting your experience and achievements in the field.

Most importantly, for less experienced medical physicists with limited options for achieving Reviewing Performance or Measuring Outcomes CPD points, the structured modules will provide a pathway to achieving one third of required points for Reviewing Performance for the 2025-2027 cycle and enable leveraging further work to achieve points in Measuring Outcomes.

For those still uncomfortable with, or unsure about, adding a reflective component to CPD activities to achieve maximum points, completing Module 1 only will give insight into a methodology that can be uniformly applied, as required.

Download and save the PDF brochure as your guide to CPD points or bookmark the CPD page on the website. The website page will also contain a guide to claiming CPD points.

Watch out for all the details in the New Year plus how to enrol.

Have Your Say

Draft National Framework for Genomics in Cancer Control

Cancer Australia is inviting you to have your say in the consultation process for the draft National Framework for Genomics in Cancer Control.

Genomics-informed cancer care has the potential to improve the experience of people affected by cancer across the cancer care continuum.

Visit our Engagement Hub at Cancer Australia to complete the survey. The consultation period closes on Tuesday 24 December 2024.

ENGAGEMENT HUB

Shape Tasmanias 20-Year Preventive Health Strategy

The Minister for Health, Guy Barnett MP, has just launched a Discussion Paper seeking input into the development of a new 20-Year Preventive Health Strategy for Tasmania. This is a unique opportunity to contribute to a long-term strategy that aims to make Tasmania healthier by improving the systems that affect peoples health and support people with more options for healthier behaviours.

Updates can be found at www.health.tas.gov.au/20-year-preventive-health-strategy.

The consultation closes on 25 May 2025.

VIEW UPDATES

College News



Director election outcomes for your 2025 Board

At the AGM held on Wednesday 11 December, the President, Kevin Hickson, announced the outcomes of the recent director election. We are pleased to confirm that Ivan Williams has been re-elected, and Mohammad Haskali has been newly elected as a director. The President extended congratulations to both Ivan and Mohammad on their successful appointments.

The President also acknowledged the significant contributions of outgoing director Trent Aland, expressing gratitude for Trent's dedicated service and valuable input over the past three years.

In addressing the members, the President encouraged all eligible members to consider standing for election in future processes, highlighting the director role as both rewarding and vital to the ongoing success of the College.

Finally, the President thanked the current directors and the CEO for their commitment and efforts throughout 2024.



ACPSEM Board Members

Front L-R: Michael Bernardo, Kevin Hickson, Kym Rykers. Back Row L-R: Ivan Williams, Ben Cooper, Andrew Cousins, Trent Aland

Theranostics Working Group

A newly established Theranostics Working Group (TWG) met for the first time this month following an Expression of Interest which was sought from eligible members.

In 2023 the ACPSEM Board resolved that the College would commission a Theranostics Working Group which would be tasked with oversight of matters pertaining to the ACPSEM Scope of Practice for Medical Physicists in Theranostics.

Chair, Dr Matthew Griffiths, is thrilled with the composition of the WG which has an excellent spread across all specialties.

The scope of Theranostics is being considered as are key issues linking with ANZSNM and Medicare changes.

The TWG intends to meet twice early in 2025, including after a joint ACPSEM ANZSNM dosimetry meeting in February.

National Registration of Medical Physicists

The College has been developing a submission over the past three years for NRAS registration of Medical Physicists. Further information is available on our website and we will keep you updated with next steps and expectations around implementation.

[MORE INFORMATION](#)

Events/Save The Date



- [IUPESM World Congress 2025](#), Adelaide, 29 September - 4 October, 2025
- AIP Council Meeting (C77), University of Melbourne, 3 - 4 February, 2025
- [TROG Cancer Research 2025 Annual Scientific Meeting*](#), Brisbane, 18 - 21 March, 2025

**Attendees can claim 2 CPD points per hour to a maximum of 10 points per day, or a maximum of 40 points for attendance of the meeting in full.*

College Closure

The College will close for a short break on Friday 20 December and reopen on Monday 6 January 2025.

Help Plan The Work of The College

Each year the College designs and delivers a workplan that reflects our priorities, emerging issues and technologies, and to further develop our profession.

At EPSM 2024, members had the opportunity to put forward ideas to help shape the 2025 workplan.

If you were unable to join us at the conference, we encourage you to contact us at membership@acpsem.org.au to contribute.

Let's hear from you!

Send your news or newsletter ideas to us at membership@acpsem.org.au

Keep your message to 200 words or less and consider who, what, when and why this information would interest the ACPSEM member network.

Get Social



[LinkedIn](#)



[Web Site](#)



[E-Mail](#)

Copyright 2024 ACPSEM, All rights reserved.

Our mailing address is:

808/35 [Spring Street](#)

[Bondi Junction NSW](#) 2028 AUSTRALIA

Phone: +61 (0)2 8305 3900