ACPSEM

Australasian College of Physical Scientists & Engineers in Medicine

Annual Report

2024/25

Our Vision

Safe and effective diagnosis and treatment

Our Purpose

To advance medical science to keep our community healthy and safe

CONTENTS

THE AUSTRALASIAN COLLEGE OF **PHYSICAL SCIENTISTS & ENGINEERS IN MEDICINE**

OUR VISION

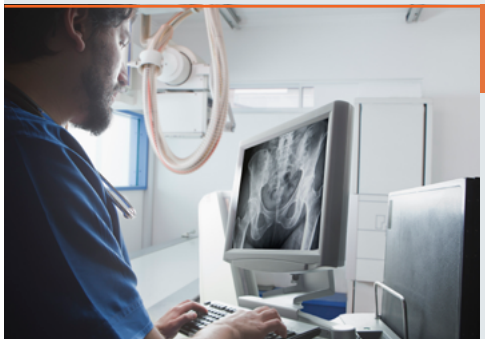
Safe and effective diagnosis and treatment

OUR PURPOSE

To advance medical science to keep our community healthy and safe

OUR VALUES

- A commitment to quality and safety in the practice of clinical science and engineering, centred on the best interests of patients
- A determination to support workplace innovation and safe and evidence-based translation of research into clinical practice
- The personalisation of learning and all collegiate experiences for all members
- Transparency and accountability in all activities



OUR STRATEGIC PILLARS

- Sustainability
- Members
- Education
- The Profession

ACPSEM **BOARD OF DIRECTORS**

Michael Bernardo
President

Ben Hug
Vice-President

Kevin Hickson
Immediate Past Present

Andy Cousins
Director, Risk, Audit, and Finance Committee

Ben Cooper
Director, Head of Specialties

Kym Rykers
Treasurer

Rosemary Peavey
Independent Director

Ivan Williams
Director

Mohammad Haskali
Director

OUTGOING PRESIDENT'S REPORT

Kevin Hickson: 2023 - February 2025

It has been a great honour to serve the College and its members as President.

The 2025 Annual Report sees a change in its delivery cycle, moving from end of calendar year to aligning with the financial year. As such, I have the great pleasure of providing an update from my term, and introducing the 2025 ACPSEM President, Michael Bernado.

Mikey has served the ACPSEM for many years, including as Treasurer since 2023. During my term, I have seen our professional community continue to grow stronger. Our focus on building College governance, recognition of our profession across the healthcare sector, and prioritising the future of safety and quality has seen some exceptional outcomes.

Most of what we do at the College relies on insights and time from members, particularly those who lead and contribute to our Special Interest Groups, Working Groups, Specialty Groups, and Branches. We have a growing number of Special Interest and Working Groups that are both responsive to external policy and technical developments, as well as issues that are identified and driven from within the profession. Thank you all for the dedication and passion you have shown, and continue to show, for our professions.

Over 2024, three years of hard work to address the identified risks of our professions to the public came to fruition, with the first draft of the ACPSEM submission to the National Registration Accreditation Scheme (NRAS). Years of research, College assessment, resource building and membership consultation culminated in a robust and convincing response to the NRAS criterion for AHPRA registration. We are confident we have a strong case to take to governments based on the outcomes of that research. This is only possible because of the many hours of input from members across the ACPSEM, including surveys, workshops, and focus groups. It is with great confidence that I hand over the next phase of this project, the stakeholder engagement, and political support efforts to Mikey.

Medical physicists are critical for the safety and outcomes of healthcare consumers and providers, and there are several ways we have been building as a profession with regards to quality and safety this year. With leadership and support from members, we are contributing to an increasing number of policy opportunities, which is raising our profile in the health sector.

However more importantly, we are demonstrating the value medical physicists bring to safety and quality of care: our new Training Education and Assessment Program (TEAP) curriculums are receiving excellent feedback, and our work in theranostics, AI, and new national technical standards in medical imaging are being noticed. Thank you to all working group members and contributors for their work on the resources and advice we have developed in the past year.

At EPSM 2024, we launched the first medical physicists' clinical governance modules for future TEAP and CPD education. These modules will strengthen the skills needed by medical physicists to promote the role of the profession and embed the highest quality and safety outcomes into facilities, health planning and regulation. I'm grateful for the guidance of the working group to ensure that this education is relevant and tailored to our profession and to the variety of healthcare settings we work in.

As always, I was extremely impressed with the contribution from our members at the EPSM conference in November. Congratulations to all the excellent speakers, our Summer School participants, and of course the Award winners from 2024. As we look ahead, our eyes are set on the World Congress in 2025, a global stage where we will showcase the

excellence and innovation that define the ACPSEM. Thank you to all the individuals who have already contributed to the World Congress and all members should take the opportunity to get to Adelaide next year.

Finally, we have continued to focus on sustainability of the College, and value for members. I'm pleased to say we have a record number of members, especially young student members who will benefit from the community and collaboration within the College. It is a source of pride to say we have now over 1000 members.

Thank you again to all our members, leaders, volunteers and staff. See you for an even bigger year in 2025.

Incoming **PRESIDENT'S REPORT**

Michael Bernardo: February 2025

I am both honoured and thrilled to step into the role of President for the ACPSEM.

Having worked in diagnostic imaging medical physics for over 15 years and serving as a Board Director/ Treasurer for the past few years, I've seen firsthand the incredible impact our work has on patient care. That's what fuels my commitment to advancing our profession and ensuring we are always part of the conversation around healthcare innovation. I am dedicated to ensuring that ACPSEM remains a critical voice in the evolving healthcare landscape.

There are big things on the horizon for ACPSEM, and I would like to extend my sincere thanks to the outgoing office bearers, especially Kevin (outgoing President) and Andy (outgoing Vice-President), for their exceptional leadership and countless volunteer hours. Their tireless efforts have laid a solid foundation for ACPSEM and we are truly grateful.

As I step into this role, I'm eager to work alongside a talented team of Board Directors, ACPSEM staff, and member-volunteers — each of whom shares a deep commitment to advancing our profession. Together, we will continue to advocate for the essential role that ACPSEM members play in healthcare and drive forward initiatives that will shape our future.

I look forward to hearing from all of you as we embark on this journey together. Stay engaged through our events, and don't hesitate to share your thoughts or ideas — your input is invaluable as we shape the future of ACPSEM and the broader healthcare landscape.

CEO'S **REPORT**

Di Robinson

I am pleased to present the 2024/2025 CEO report and to thank you for your continued support of ACPSEM.

Firstly, I would like to extend my gratitude to Cathy Barbagallo and the 2024 EPSM Committee for delivering an exceptional 2024 conference. Opportunities for networking, information sharing, and improving communication are invaluable to our profession and progress.

Additionally, I want to thank our ACPSEM volunteer members for their contributions over the past 18 months to developing key papers, representing the College at industry activities, and ensuring our progress. Without your expertise and input, ACPSEM would not be the flourishing professional body it is today.

STRATEGIC PROJECTS

Evaluation of the Medical Physicists Support Program

The Department of Health and Aged Care undertook an evaluation of The Medical Physicists Support Program which is a Commonwealth-funded program delivered by the ACPSEM. This program aims to increase the capacity and upskilling of the medical physics and radiopharmaceutical science (RPS) workforce.

The Commonwealth Government has provided funding to support the medical physics workforce since the early 2000s. The current iteration of the MPS Program was established in 2018 and the ACPSEM administers all aspects of the program activities.

KPMG undertook the evaluation on behalf of the Department, and I would like to thank all those who participated in this process. The evaluation was extremely positive and emphasized the critical work that medical physicists and radiopharmaceutical scientists play in the medical workforce. The evaluation report will be available on our website as soon as we are able to release it.
We are now working on reviewing and implementing the recommendations from the evaluation and working on our funding.

Education 2030

ACPSEM is thinking toward the future and identifying key areas of skill and education requirements for the profession, from university study through to continuing professional development. An expert Working Group has been established to identify key environmental drivers for the profession. Over the coming year, we welcome your feedback and involvement as Working Groups are established for further research and resource development.

Clinical Governance

The Clinical Governance Modules were launched in July 2025 , emphasising the importance of safe and effective care involving MTD that includes medical physicists.
Research has shown gaps in awareness and inclusion in clinical governance among medical physicists in Australia. These findings are central to our National Registration application with AHPRA.

The Clinical Governance modules are:

- Module 1 - The Fundamentals of Clinical Governance
- Module 2 - Applying Clinical Governance Principles to Current Practice
- Module 3 - Additional Clinical Governance Principles for

Leadership Roles

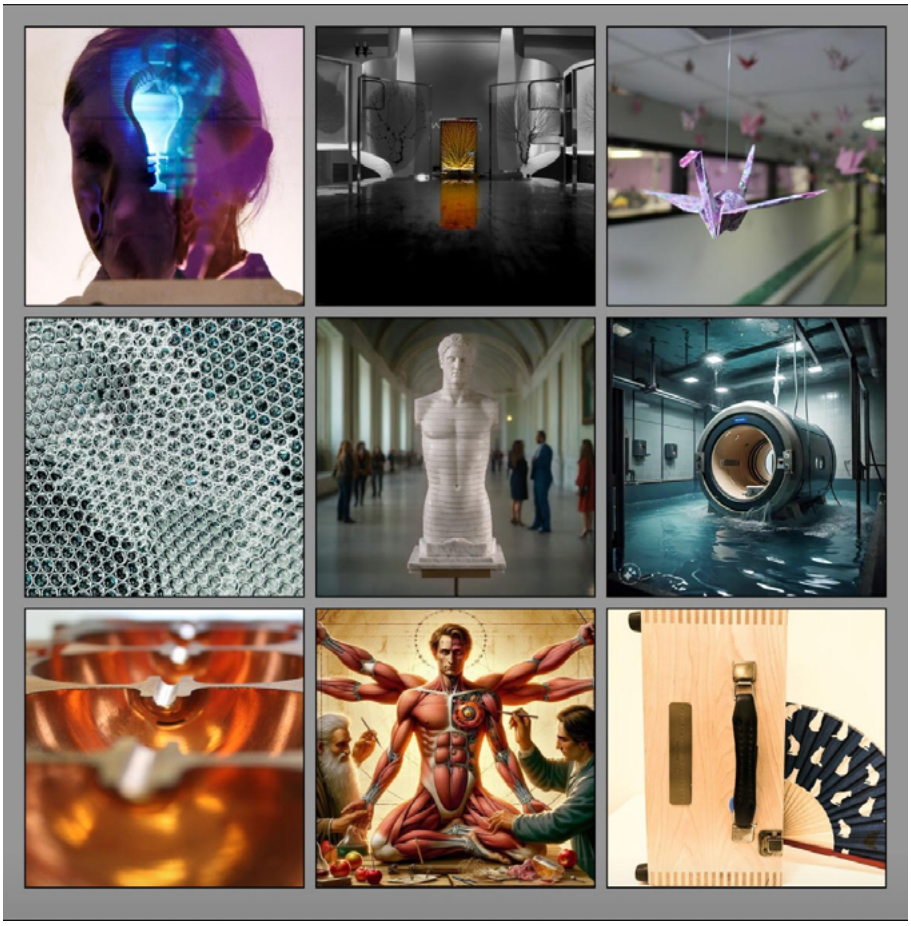
Each module includes activities for completion and certification. Module 1 will be compulsory for new entrants to the QMPS Register .

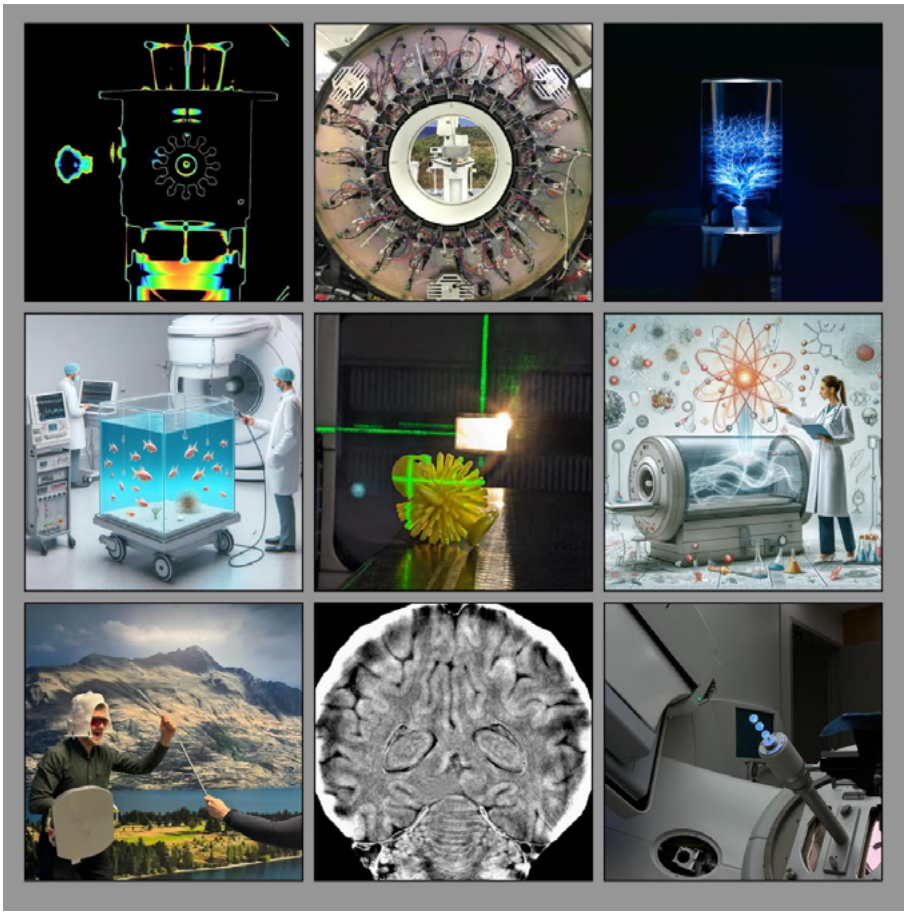
NRAS Update

Achieving National Registration remains a strategic priority for ACPSEM, recognising the voice and aspirations of our members. Our submission proposes joining the Medical Radiation Practice Board, emphasising the need for better regulatory systems to ensure public safety and quality standards for medical physicists and radiopharmaceutical scientists. As part of ACPSEM's NRAS submission process we have engaged and consulted with a broad range of key stakeholders. Stakeholders have included all state Chief Allied Health Officers and key Medical Colleges and Peak organisations. Our submission is now on pause, as there is an independent review of the whole NRAS system and the timing of this review makes it difficult for us to submit at this time.

Key findings from our research highlight the critical role of medical physicists and radiopharmaceutical scientists, and the lack of mandated education and CPD requirements. There is a need for robust clinical governance systems to oversee the professions, addressing the risks posed by outsourcing and varied oversight mechanisms.

Thank you for your continued support and contributions. Together, we are paving the way for a safer and more effective healthcare environment.





TREASURER'S **REPORT**

Kym Rykers

As Treasurer, I am pleased to provide a comprehensive overview of the financial status and future direction of the ACPSEM.

Since 2018, the ACPSEM has received federal government funding to provide grants for training positions and support the college's operations to ensure professional standards. This financial support is crucial for delivering our mission, enabling us to train and accredit medical physicists and radiopharmaceutical scientists, develop learning opportunities, and uphold professional standards.

Securing this funding for the next three years is critical. We are confident that the government recognises the vital work we do, as this funding is not just financial support, but an investment in better healthcare outcomes.

Membership and Financial Status

As mentioned, the ACPSEM currently boasts over 1,000 active members and 113 registrars across Australia and New Zealand. In the 2024-2025 fiscal year, we recorded a surplus of $205,302 compared to $19,832 in 2023-2024. The College has retained net assets of approximately $1.8 million, providing a working capital surplus to cover any expenses in the short- to medium-term.

Expenditure and Investment

It is important to remember that the ACPSEM is a not-for-profit organisation, and our mission is to use funding to advance the College's aims. This year, we have focused on improving services that our members rely on. This includes modernising internal operations to enhance support, efficiency, transparency, and responsiveness to members' needs.

Key activities in this regard include:

- Addressing internal operational policies and procedures;
- Aligning staffing to emphasize accountability and commitment to members;
- Updating the CRM and ACPSEM SharePoint to improve collaboration and document management.

NRAS Submission and Future Focus

Another significant focus of expenditure this year has been advancing our NRAS submission. We have dedicated considerable attention and resources to publish our scope of practice and engage with other health professions and stakeholders to highlight the critical impact of medical physics in healthcare. This initiative will remain a key focus and expenditure area next year.

In summary, while challenges remain, I am confident that the ACPSEM will continue to grow and thrive. We must remain involved in improving our profession, advocating for the work we do, and sharing our story widely with other health professionals and the broader public.

Thank you for your continued support.

OUR **KEY ACHIEVEMENTS**

NRAS Submission
2024 saw the completion of several years of research, consultation and projects culminating in the first completed draft of a submission to the National Registration Accreditation Scheme. The aim of this submission to join the AHPRA Radiation Board and ensure medical physicists are nationally regulated in improved the quality and safety of care for the Australian public.

2025 has been dedicated to stakeholder engagement across the healthcare sector. Feedback and support will be incorporated with the aim of submitting the application in late 2025.

2024 EPSM

The 2024 November EPSM held in Melbourne was a resounding success, combined the meeting with Engineers Australia to include their annual biomedical engineering meeting (ABEC). Risk management and patient care were central to the themes of the speakers, along with shaping the future, global outreach and AI.

AWARDS

Annual ACPSEM Awards

- Innovation and Future Impact (matching the conference theme) - Jacinta Yap
- Improving Patient Care or Outcomes - Danielle Chrystal
- 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
- 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
- Kenneth Clark Award for Best Paper published in Physical and Engineering Sciences in Medicine - Benjamin Shields and Prabhakar Ramachandran
- ACPSEM Life Membership - Prof. Richard Jones

2024 Summer School

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. The ACPSEM Summer School 2024 for the Diagnostic Imaging Stream brought together registrars and experts for a dynamic and intensive exploration of this year's 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

Policy Submission on Medical Imaging Standards

ACPSEM provided a submission to the Australian Commission on Quality and Safety in Health Care consultation on the National Safety and Quality Medical Imaging (NSQMI) Standards. These standards will replace the Diagnostic Imaging Accreditation Scheme Standards. Member David Thiele led a group to develop a response from ACPSEM to the Technical Safety Standards part of this consultation.
ACPSEM AI Research and Collaboration Workshop
Medical Imaging (NSQMI) Standards. These standards will replace the Diagnostic Imaging Accreditation Scheme Standards. Member David Thiele led a group to develop a response from ACPSEM to the Technical Safety Standards part of this consultation.

ACPSEM AI Research and Collaboration Workshop

In October 2024, 126 participants attended the first ACPSEM AI Working Group Research Workshop webinar on Auto Segmentation. The session brought together presenters from clinical, academic and research backgrounds to discuss the latest developments and share insights.

THE COLLEGE **AT A GLANCE** (as of 30 June 2025)

BOARD MEETING ATTENDANCE

Name	Eligible	Attended
Michael Bernardo[1]	11	10
Ben Hug	11	9
Kym Rykers	11	9
Ben Cooper[2]	9	9
Trent Aland[3]	5	2
Ivan Williams	11	9
Andrew Cousins	11	11
Kevin Hickson[4]	11	11
Mo Haskali[5]	6	6
Rosemary Peavey	11	7
Sheruna Naidoo[6]	2	0

1. Chair from 31/1/25
2. From 21/5/25
3. To 31/12/25
4. Chair to 31/1/25
5. From 1/1/25
6. To 22/3/24

42 | TEAP Graduates

35 | New TEAP Trainees

25 | General Skilled Migration Assessments

TEAP TRAINING GRANTS PROVIDED

2024 14 ↑ 19 2025

ACPSEM ACCREDITED UNIVERSITY COURSES - 7

TEAP TRAINEES | DIMP 28 | ROMP 70 | RPS 12

TOTAL ACTIVE MEMBERS

- Student: 98
- Affiliates: 27
- Associate: 176
- Member: 690
- Life Member: 5
- Fellow: 18
- Distinguished Fellow: 14
- Organisational Supporter: 34

TOTAL: 1,062

EPSM 2024

Conference and Gala Dinner attendees: 378
Summer school attendees: 66
Awards presented: 13

COMMUNICATIONS

EOIs 12 | Surveys 6 | Newsletters 11

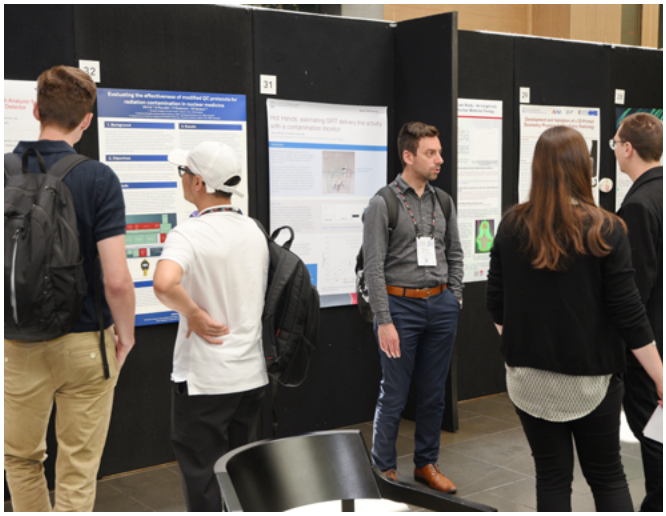
JOB BOARD

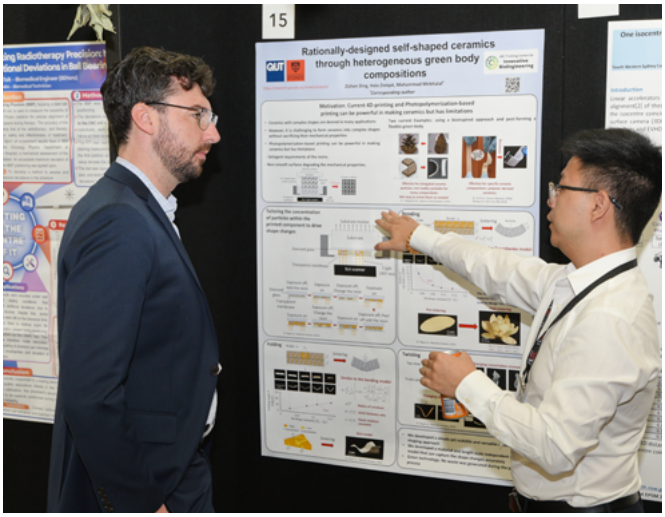
65 Job Listings
30 Job Alerts

JOURNAL

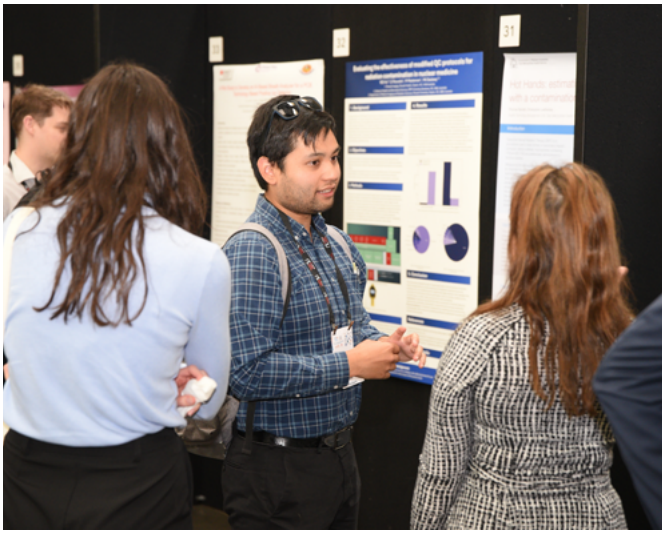
753 Papers Submitted
123 Papers Published

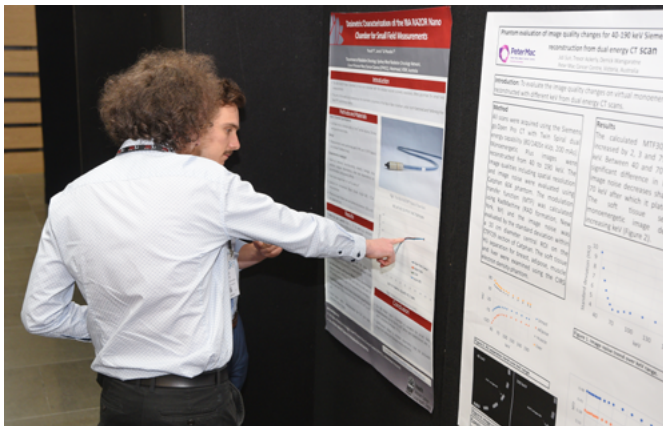
EPSM **2024**




15
Rationally-designed self-shaped ceramics through heterogeneous green body compositions

EPSM **2024**





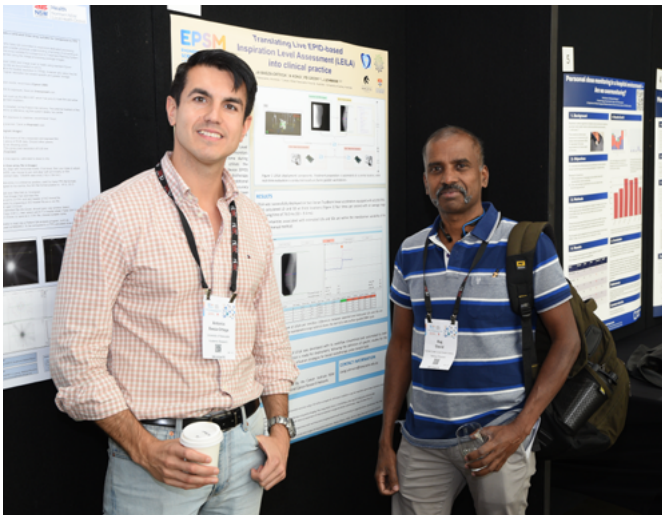

Photography in Medical Physics
2024 Finalists
ACPSEM
Australasian College of Physical
Scientists & Engineers in Medicine
Trusted voice
Professional registrati
Networking
Knowledge and skills


SYMBIOTIC DEVICES

EPSM **2024**


alpha
PHILIPS


Digital Production – Dedicated Hosts for virtual attendees


EPSM

THE ACPSEM **COMMITTEES, PANELS, & BOARDS**

Membership Committee

The Membership Committee plays a critical role in maintaining the standards and integrity of ACPSEM by overseeing membership applications and ensuring the highest levels of professionalism within the fields of physical sciences and engineering in medicine.

The committee is responsible for carefully reviewing membership applications and membership upgrades, assessing applicant qualifications, and confirming their alignment with ACPSEM's membership criteria. They also review and update guidelines, policies, and procedures to ensure the application process remains transparent, fair, and consistent with current professional standards. Committee members actively contribute to discussions and decisions regarding applications. Their professional judgment and insights are essential in determining an applicant's suitability for membership. Effective collaboration among committee members ensures that decisions are well considered and that the process reflects both integrity and fairness.

By carrying out these responsibilities, committee members not only uphold the standards of ACPSEM membership but also contribute to the organisation's broader mission—promoting professional excellence, advancing the discipline, and fostering an inclusive and trusted professional community.

Professional Standards Board

The Professional Standards Board (PSB) is a critical enabler of the ACPSEM education and accreditation processes, developing and overseeing the relevant policies and procedures. The PSB provides oversight and guidance to the Certification Panels and regularly provides advice to the Board of Directors.

During the reporting period, the PSB developed the Brachytherapy Certification Program and the Clinical Governance Modules and was delegated responsibility from the College Board for both the Scope of Practice and the Advanced Scope of Practice. They were also involved monitoring TEAP data from a strategic perspective, considering changes to the Appeals Policy (including the criteria for lodgement of appeals), and overseeing the development of the new Plagiarism Policy.

In addition, the PSB made a recommendation to the College Board not to continue offering the stand-alone Certification in Position Emission Tomography Acceptance Testing and QC qualification. They oversaw the review and redesign of the College CPD program and processes, while monitoring the Diversity, Equity, and Inclusion Special Interest Group work program to ensure alignment with broader strategic goals.

Certification Panels (Diagnostic Imaging, Radiopharmaceutical Science, Radiation Oncology)

Our Certification Panels, DICP, ROCP and RPSCP, represent our three core disciplines to ensure that our Training, Education, and Assessment Pathways (TEAP) registrars progress effectively through their training programs. The Panels meet quarterly and are under the leadership of a Panel Chair. The panels' effectiveness is supported by a team of dedicated TEAP Coordinators.

An important focus of our Panels is to identify registrars who are not progressing as required, and to develop and implement strategies to encourage participants to finalise their qualifications. In the first half of 2024, the Panels finalised implementation of the new TEAP curriculums. Review and strengthening these curriculums is an ongoing process. The Panels work organically with our PSB. When necessary, issues are referred to the PSB, and following PSB considerations, guidance is provided back to the Panels.

Workforce Sub Committee

The workforce Sub Committee was formed as a subcommittee of the Board in 2023. The Sub Committee was tasked with oversight of ACPSEM Workforce Models and ACPSEM workforce initiatives.

The Workforce Committee undertook several key activities in 2024-2025. This included a revision of the ACPSEM ROMP Workforce model, which has been developed and is currently being prepared for distribution. In addition, major revisions of the ACPSEM workforce models are planned to commence in 2026.

The ACPSEM also contributed to an ARPANSA consultation regarding the national radiation protection workforce, ensuring that the profession's perspective is represented in national policy discussions.

Continuing Professional Development Committee

The Continuing Professional Development (CPD) Committee plays a vital role in supporting lifelong learning across our professions. It oversees the development and delivery of CPD programs, ensuring they remain relevant, high-quality, and aligned with both regulatory standards and member needs. By reviewing frameworks, advising on policy, and promoting engagement, the Committee helps ensure that all professionals have access to meaningful opportunities to grow their skills, stay current with industry developments, and uphold best practice.

In 2024, CPD audits were completed on 10% of people (approximately 70) who are on the Register of qualified medical physics specialists and radiopharmaceutical scientists. Nine members of the CPD Committee volunteered for this important task. Overall, more than 80% of the auditees met or exceeded expectations, as defined by CPD audit interview rubrics developed for this purpose. Additionally, the audit interviews were an excellent opportunity to give and receive feedback on the ACPSEM CPD system.

Most auditees appreciated the time spent with their auditor to review the content of their records, provide advice and to discuss the relevance of certain activities. Some auditees were not familiar with the guidance documents released by the ACPSEM to help with the use and the interpretation of the CPD handbook (released in 2022). Auditors shared their own experience and expertise with members of the Register across different specialties.

Register participants were sent reminders that they were coming to the end of the current CPD triennium during the final months of 2024. At the end of the year, around 100 were non-compliant with respect to the CPD requirements for continuation of their registration. As of 14 April 2025, there were 16 non-compliant members for CPD; these members have since been removed from the ACPSEM Register.

THE ACPSEM **BRANCHES**

South Australia and the Northern Territory

The SA/NT Branch held an online seminar at the Australian Bragg Centre for Proton Therapy and Research on the 21st of June 2024. The session on proton comparative planning by Associate Professor Scott Penfold and Associate Professor Alexandre Santos attracted 147 attendees and has been shared with all other ACPSEM members.

Student Paper Night was held on 18 September 2024 with 6 presenters from medical physics and radiation protection courses at Adelaide University. The evening was a great success with over 30 attendees.

A TEAP and Early Career Education Practical session with MRI and Photon Counting Detector CT at SAHMRI was held on 18 October 2024. This proved to be a valuable educational experience, confirmed by excellent feedback from attendees.

Victoria and Tasmania

The VIC/TAS Branch hosted a successful Student Night in collaboration with RMIT University, featuring eight postgraduate medical physics students presenting research, evaluated by a panel of four expert judges. Prizes were awarded to support student attendance at the EPSM conference. A social event designed to foster networking opportunities allowed students to connect with experienced physicists and industry professionals.

The Proton Therapy Seminar attracted a strong turnout, which highlighted growing interest in this rapidly advancing field. Two Victorian- based experts, Dr. Jacinta Yap (University of Melbourne) and Dr. Adam Yeo (Peter MacCallum Cancer Centre), shared valuable insights into clinical applications, current research, and developments in proton therapy, including Australia's first particle therapy facility.

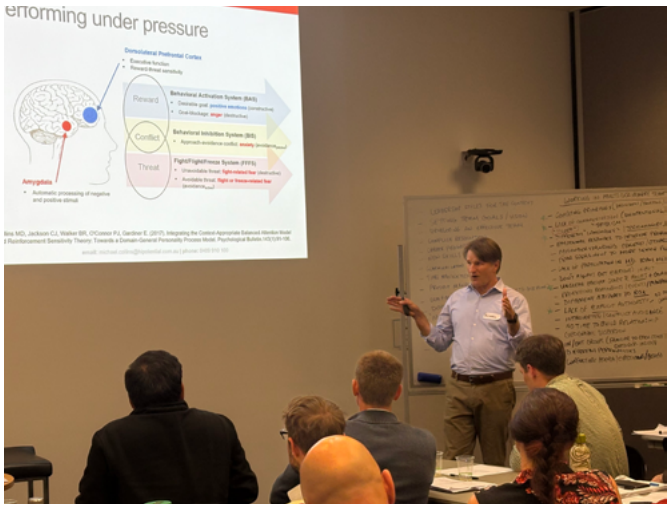
DIMPLE Day 2025 was a successful and well-received event, held at ARPANSA and proudly sponsored by the VIC/TAS Branch. It provided an important opportunity for DIMPs to learn, share knowledge, and engage in meaningful discussions on current challenges and innovations in the field.

Queensland

The QLD Branch Leadership Committee successfully delivered various events and CPD activities from January 2024 to May 2025, including webinars and Progress and Research in Medical Physics series (PRIMPS) meetings. The approach to PRIMPS meetings, focusing on work in progress and tricky problems, was well received and continued throughout the year.

The inaugural Steven Sylvander Research Communication Challenge (SSRCC) was launched in October 2024 to enhance research communication skills. The event included preparatory workshops and awarded prizes to winners in various categories, improving engagement and membership numbers.

The 2024 Winter School Symposium on “Breast Cancer: Diagnosis and Treatment” was held on 16 August at Princess Alexandra Hospital. It featured insightful presentations from key members and excellent attendance, both in-person and online.



Western Australia

The WA Branch delivered a successful Branch-scientific meeting in October 2024 and presented a Written Award in December 2024. Planning is well underway for the next event and Written Award in the second half of this year.

In June 2025, the WA Branch co-hosted a national educational webinar with the QLD Branch, Re-188 Brachytherapy for Non-melanoma Skin Cancer, showcasing this relatively new and innovative treatment modality and contributing to national CPD offerings.

Social connection was supported through a casual event in October 2024 and a Paint & Sip night in April 2025. Planning is also underway for another social event following the August 2025 Branch meeting.

New South Wales and the Australian Capital Territory

The NSW/ACT Branch successfully held several events, including Annual Research & Development Days in August 2024 and May 2025. These events saw presentations from clinical departments on clinical research and service development and encouraged collaboration and resource sharing between departments alongside the University of Sydney's Institute of Medical Physics.

Further, the Branch also hosted a two-day imaging workshop and a Medical Physics event, which saw research presentations from undergraduate, post-graduate, and PhD students, and registrars.

Lastly, five Branch members were presented with an educational scholarship in 2024 to assist in achieving CPD points.

New Zealand

The NZ Branch has been supporting learning and collaboration via the national Branch conference NZPEM and peer review sessions.

NZPEM is a well-attended event, held in Palmerston North in 2024 and Dunedin in June 2025. Monthly online peer review sessions include collaborative discussions on different practices. Recent sessions covered re-irradiation workflow, CT QA, HDR Brachytherapy source calibration, and upcoming Motion Management in Radiotherapy.

The Cultural Safety Working Group has developed the ACPSEM New Zealand Branch Te Tiriti o Waitangi Framework for Aotearoa, New Zealand, aimed at promoting equity for the Māori population. This framework will be implemented through cultural safety training at significant conferences such as NZPEM and EPSM.

The Branch regularly responds to relevant national consultations. Recent consultations include updates to the radiation codes of practices and on proposed government changes to the health workforce regulatory environment.

THE ACPSEM **WORKING GROUPS**

Particle Therapy Working Group

The Particle Therapy Working Group (PTWG) was established in 2018 to create a national collaboration supporting the safe and effective introduction of proton therapy in Australia. The PTWG includes representatives from each State and Territory Branch of the College, as well as ARPANSA, except for New Zealand.

In 2024, Scott Penfold stepped down as Chair of the PTWG after serving a six-year term. His contributions during this time have been invaluable, and we extend our sincere thanks for his expertise, time, and leadership.

Through 2024-2025, 25 participants successfully completed the Level 1 ACPSEM Online Particle Therapy Training. In addition, the ACPSEM Position Statement on the commissioning and quality assurance of proton therapy facilities has been approved by the ACPSEM Board and will be published shortly.
The PTWG is also currently undertaking a technical review of model-based selection for proton therapy.

AI Working Group

The Artificial Intelligence Working Group (AIWG) was formed to facilitate the safe and effective development and clinical deployment of AI-integrated technologies in healthcare. ACPSEM members are positioned at the coal face of this rapidly evolving field and have significant influence over how the associated technologies are implemented. The role of the AIWG is to provide advice on integration of the relevant concepts across education, training, clinical deployment and research.

A seminar series has been established to link novel and emerging AI opportunities with clinical challenges. These seminars feature presentations from both AI and clinical experts, creating opportunities for collaboration and continued learning across these areas of expertise.

The Group is also undertaking a survey on AI use within the ACPSEM clinical practice. As the role of AI expands, this survey will provide a benchmark for how AI is currently applied and inform expectations about its future use.

In collaboration with the TEAP development groups, the AIWG is supporting the integration of AI training opportunities for the future workforce. This includes setting expectations and requirements, as well as developing resources to help TEAP candidates and other professionals learn about AI, its potential applications, and associated challenges.

Quality Assurance and Safety in Diagnostic MRI Working Group

Formed in April 2024, the QA and Safety in Diagnostic MRI Working Group (QASDMRIWG) has made steady progress throughout 2024–2025, despite delays caused by the MRSE course, in which many members were involved as participants or educators.

Over this period, the Group has begun developing two position papers, one focused on QA in diagnostic MRI and the other on safety. A draft of the QA paper has already been prepared, which includes a detailed list of tests together with an outline of their potential clinical impacts.

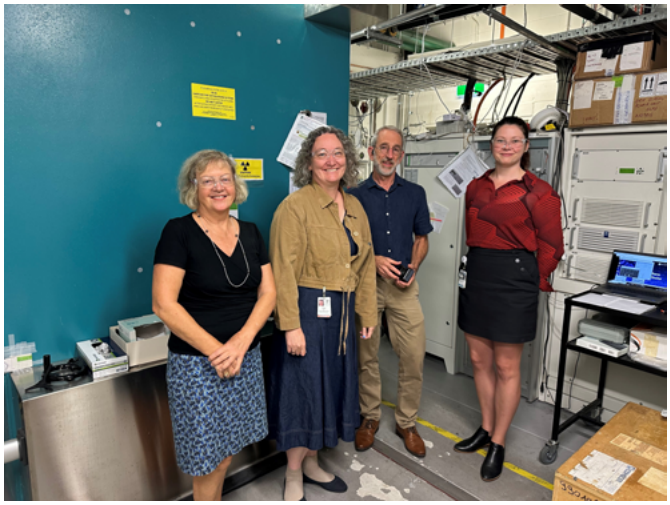
In April 2025, the working group also expanded its membership following a college EOI, enabling the workload to be more evenly distributed and helping to maintain momentum.

Theranostics Working Group

The Theranostics Working Group (TWG) was formalised in December 2024. This was followed by a workshop and full-day meeting held in Brisbane in February 2025.

The Goup's key priorities include defining the scope and role of practice in the emerging field of theranostics for the ACPSEM's members and providing a clear definition of theranostics as it applies in Australia and New Zealand. The Group is actively engaging with members and service providers to capture current work practices and experiences, with the aim of demonstrating the efficiency and effectiveness of the ACPSEM workforce in this area. In addition, the Group is working to identify minimum standards of practice to ensure both clinical efficiency and patient safety.

Another focus is advising on training, education, and certification requirements that the ACPSEM may adopt to support the future scope of practice in theranostics. To support this work, a draft working title has been proposed for the scoping document: *The ACPSEM Recommended Technical Standards for the Delivery of Theranostics*.



Brachytherapy Working Group

The Brachytherapy Working Group advises on certification and assessment methods as required. Over the past 18 months, the Brachytherapy Working Group (BWG) has paused its usual activities to focus on developing advanced Brachytherapy Training, designed to complement and extend the foundational learnings in the Radiation Oncology Medical Physicist TEAP.

This work is a significant step forward in advancing education in brachytherapy. The certification will be available to current members as well as TEAP trainees, who will have the option of completing the modules alongside their training.

The ACPSEM is deeply grateful for the expertise, time, and effort that has gone into the development of this important certification.

For more information on College Working Groups please visit HERE.

THE ACPSEM **SPECIAL INTEREST GROUPS**

Diversity, Equity, and Inclusion Special Interest Group

The Diversity, Equity, and Inclusion Special Interest Group (DESIG) has worked to ensure that TEAP registrars receive clear guidelines on disability accommodations during the certification process, in line with the Commonwealth Disability Discrimination Act 1992.

A survey will soon be distributed to the ACPSEM's members to anonymously gather baseline data on challenges faced, guiding future initiatives. This survey will proceed following ethics approval from a Human Research Ethics Committee (HREC) to support evidence-based policy development.

University Special Interest Group

The University Special Interest Group (UniSIG) is primarily for the ACPSEM's members who are involved in undergraduate and postgraduate medical physics and biomedical engineering programs.

The PSB had proposed moving to annual reporting for Universities against their Accreditation requirements, and any conditions or recommendations arising from re-accreditation reviews.

The UniSIG and Program Coordinators Group reviewed and discussed the proposal and suggested features that would minimise the reporting burden, while providing PSB with the most relevant information. The PSB viewed these suggestions favourably with the intention to adopt.

Asia Pacific Special Interest Group

The ACPSEM no longer directly oversees the running and administration of the Asia Pacific Special Interest Group. Our Foundation, Better Healthcare Technology, now takes full responsibility for its maintenance. The Better Healthcare Technology Foundation webpages are still under construction as at July 2025 and will be released in coming months.

The cancer centre in Port Moresby, PNG, is nearing completion, with the instalment of the Varian Halcyon linear accelerator and additional equipment anticipated soon. Support for local Medical Physicists will include remote TEAP training, online Eclipse treatment planning, and visits from certified ACPSEM ROMPs for commissioning and clinical treatment, starting in late 2025. A scoping visit with colleagues from RANZCR and ASMIRT is planned for September 2025.

In Vientiane, Laos, Mittaphab Hospital has faced a shortage of qualified ROMP staff since September 2024. APSIG volunteers Andy Schofield, Neal Molloy, and Karthick Raj Mani aided with training through two-month assignments, each with the potential for further initiatives. This collaboration (initiated by the IAEA) marks the first long-term support effort of its kind in Laos.

In Cambodia, Luang Me Hospital is in the process of commissioning a new Truebeam linear accelerator, making it the fourth hospital in the country to provide radiotherapy services. The hospital has requested an Australian volunteer (funded by DFAT) to serve as a ROMP trainer for six months, and an ACPSEM member will be sent to fulfil this role.

New and Early Career Special Interest Group

The New and Early Career Special Interest Group (NESIG) is specifically tailored to the needs of those who are in the early stages of their professional career in a clinically related physical science or engineering field. However, the NESIG is an all-inclusive SIG for anyone who is interested in their mission and activities.

NESIG aims to promote inclusivity in the ACPSEM workforce through fostering its early career members and providing them with representation and a cohesive voice through which to act.

The NESIG Committee co-hosted the 3rd NESIG Networking Night during the 2024 Summer School and EPSM in Melbourne. The Group is also currently developing a Welcome to TEAP Handbook for ROMPs to share tips from current and recent registrars (with permission from ROMP TEAP Coordinators).

NESIG is also exploring methods to provide educational resources for new and early career members covering topics beyond TEAP, such as soft skills and transitioning to life as a qualified medical physicist.

ROMP Training Resources Special Interest Group

The newly established ACPSEM ROMP TEAP Resources Special Interest Group will provide a forum for all those involved in the education of ROMP TEAP registrars to collaborate on the development, management, and use of high-quality training materials. Its aim is to support efficiency, enhance consistency in the delivery of ROMP TEAP, and ensure the program is applied effectively within local clinical contexts.

The RTRSIG's objectives for 2025–2026 include communicating the SIG's goals and Terms of Reference to ACPSEM members to form a leadership committee and grow membership among those interested in ROMP TEAP, creating clear procedures for submitting, reviewing, approving, and publishing ROMP TEAP resources for training centres.

The Group also plans to begin compiling a database of high-quality ROMP TEAP resources to support greater training efficiency and standardisation across Australia and New Zealand.

Medical Image Registration Special Interest Group

The aim of the Medical Image Registration Specialty Interest Group (MIRSIG) is to provide a strong and unified driving force for the management of medical image registration in Australasia, as well as providing professional standards and solutions for safe and effective use of medical image registration for the benefit of the public.

The MIRSIG has been active during 2024–2025. During this period, the Group has enhanced image registration education for clinicians by developing materials within the ALEX framework and hosting webinars on AI applications in medical registration and the effects of the HyperSight system on adaptive radiotherapy. They have collaborated with ESTRO and AAPM to publish joint guidelines on deformable image registration and create a gold standard evaluation dataset.

Recognising the growing presence of commercial adaptive solutions, the Group has also identified a need for high-quality education on AI contouring and deformable image registration and plans to continue supporting research and developing online educational resources.

Total Body Irradiation Special Interest Group

The Total Body Irradiation Special Interest Group (TBISIG) has recently been established and has been actively engaging during 2024 and 2025 .

Comprising 50 members from 19 TBI clinics, it fosters a vibrant community. Meetings occur approximately every six weeks and focus mostly on clinical practices, College affiliation, journal discussions, and frequently feature guest speakers.

The Group has been enhancing knowledge and networking opportunities, which will enable ROMPs to assume leadership roles in the adoption of evidence-based treatments.

A phantom planning study has been initiated, with contributions from most TBI clinics, aimed at assessing the dosimetry provided across various clinics.
For more information on College Specialty Groups please visit HERE.

THE ACPSEM **SPECIALTY GROUPS**

Radiation Oncology Specialty Group

The Radiation Oncology Specialty Group (ROSG) objective is to provide a strong, cohesive driving force for the management of radiation oncology medical physics profession. The groups mission is to provide proper professional standards of work and safe practice for the benefit of the public and environment.

It has been a productive 18 months for the Radiation Oncology Specialty Group (ROSG). The Group contributed to the ACPSEM's position paper on Pre-Treatment Patient-Specific Plan Checks and QA in Radiation Oncology, which was published in the PESM Journal in 2024. The paper provided significant guidance on quality assurance in radiation oncology.

The Group also developed a response to Cancer Australia's report on proton beam therapy, in collaboration with the ACPSEM Particle Therapy Working Group, Radiation Oncology Alliance, RANZCR, ASMIRT, and CCNA. The ROSG also collaborated with ARPANSA PSDL to assist with revisions to IAEA's TRS398 Code of Practice.

Lastly, the ROSG developed a position paper on Linac QA for linear accelerator quality assurance, endorsing the recent AAPM MPPG 8b guidelines with local contextualisation.

Radiopharmaceutical Science Specialty Group

The Radiopharmaceutical Science Specialty Group (RPSSG) aims to promote professional standards, training and education and the best possible outcomes for patients. The group are proud to showcase their accomplishments from the last 18 months.

Two senior radiopharmaceutical scientists, Ms. Effie Brown and Dr. Ali Asad, are collaborating with senior radiation oncology and nuclear medicine physicists in the ACPSEM Theranostics Working Group to develop technical standards for the delivery of theranostics. Their work is expected to be published within the next year.

Additionally, three senior radiopharmaceutical scientists, Dr. Doug Smythe, Dr. David Henderson, and Mr. Peter Lam, are part of the TGA Annex 1 Revision Working Group, established to revise the GMP code with outcomes expected within the next 12 months.

Lastly, the 26th International Symposium on Radiopharmaceutical Scientists held from May 11-15, 2025, attracted over 700 attendees from 32 countries. The conference featured over 500 presentations with 78 selected for oral presentations. Additionally, there were several pre-symposium workshops and 40 sponsors and exhibitors displaying the latest in RPS-enabling technologies.

Radiology Specialty Group

The Radiology Specialty Groups focus is to facilitate the interfacing and coordination of activities, fostering relationships with groups external to the ACPSEM but with common interests to those of the radiology speciality group (e.g. ARPS, RANZCR and ASMIRT).

Through 2024 and into 2025, the Radiology Specialty Group (RSG) undertook a variety of projects and work. Their key achievements included encouraging and supporting the ACPSEM in providing medical physics input to the National Lung Screening program and reviewing and providing feedback to the updated National DRLs by ARPANSA on diagnostic CT. Further, the Group implemented new leadership, opened EOIs for new membership, and worked to develop an annual plan for further contributions to the field.

Nuclear Medicine Specialty Group

The mission of the Nuclear Medicine Specialty Group is to provide a strong, cohesive driving force for the management of the nuclear medicine physics profession.

Over 2024-2025, the Nuclear Medicine Specialty Group (NucMedSG) has successfully advanced many of its strategic goals. These included undertaking a joint initiative with the ANZSNM as part of the MoU with the ACPSEM, organising a highly successful symposium on dosimetry in theranostics during February 2025 in Brisbane, and launching a committee that will draft a position paper for the ACPSEM on the standard for dosimetry in theranostics.

Radiation Protection Specialty Group

The Radiation Protection Specialty Group was established in 2005. The group's main task to date has been to provide ACPSEM input in the review of relevant documents provided by ARPANSA and other Radiation Safety Bodies.

Over 2024, The Radiation Protection Specialty Group (RPSG) focused on several key areas, including multi-society collaboration to enhance radiation protection standards and practices.

Notable highlights include the ICRP 146 Request on Ethics, where the RPSG successfully addressed the important topic of ethics in radiation protection through Cameron Jeffries' efforts in submitting the ICRP 146 request on behalf of the Group. Further, they drove initiatives to reinvigorate the multi-society collaboration efforts among radiation protection leadership, in alignment with efforts previously made in the nuclear medicine field.

The Group also initiated contact with various stakeholders and partner organisations (e.g. ARPANSA, ANSTO) to ensure a cohesive approach to developing and supporting radiation protection guidelines and standards.

THE PHYSICAL & ENGINEERING SCIENCES **IN MEDICINE JOURNAL**

In 2024, a total of 753 manuscripts were submitted for publication in the Physical and Engineering Sciences in Medicine Journal. 123 manuscripts (18%) were accepted for publication. All manuscripts undergo an initial evaluation prior to peer review. A significant portion of submissions are either rejected before reaching the peer review stage or returned to authors for revisions due to failure to adhere to the Journal's submission guidelines.

Demonstrating its global reach, the Journal received manuscript submissions from corresponding authors in 79 countries in 2024, and manuscripts accepted for publication in 2024 came from 42 countries. The scholarly publishing landscape is undergoing rapid and significant transformation, presenting both challenges and opportunities.

Key issues include the ongoing shift toward open access, the proliferation of predatory publishing practices, concerns surrounding research integrity, the evolution of peer review models, and particularly, the emergence of AI and its broader impact on publishing and research.

Within this dynamic publishing environment, the Journal will continue to engage proactively with these developments, responding to emerging challenges while embracing new opportunities.

THE BETTER HEALTHCARE **TECHNOLOGY FOUNDATION**

The ACPSEM Foundation, better known as the "Better Healthcare Technology Foundation (BHTF)", aims to support initiatives in physics, engineering and associated sciences that promote the safe and appropriate use of medical technology. At the core of the Foundation is a goal to foster initiatives in medical technologies that improve patient care and community outcomes. A major focus is on supporting innovations in the safe and effective use of radiation in diagnostic and therapeutic techniques that directly benefit patients throughout Australia, New Zealand and the Asia-Pacific.

The Foundation has maintained a low activity profile over the past 18 months to develop a plan to modify its operations. The plan, titled Future Proof, proposes a revised grassroots-based operational model that utilizes knowledge and resources from the College's Groups environment to connect the Foundation's activities with the normal operations of the College's various disciplines.

Director Lyn Oliver stepped down from the Board in 2023 and recently passed away. The Board gratefully acknowledges Lyn's years of outstanding dedication and commitment to the BHTF cause since its inception.

The Asia-Pacific Special Interest Group (APSIG), in collaboration with the BHTF, has continued supporting the training and education of Medical Physicists in Papua / New Guinea through remote tutorials and treatment planning sessions facilitated by APSIG volunteers using Varian's online learning platform, featuring the Eclipse treatment planning system. This initiative will expand in June 2025 with the opening of the national cancer centre in Ulaanbaatar, incorporating similar online training sessions with other APSIG volunteers.

The Foundation has also commenced a volunteer Medical Physics trainer assignment in Cambodia (ACPSEM member and certified ROMP Alison Chapman) in April 2025 for the new cancer centre at Luang Me Hospital in Phnom Penh, where a single Varian linear accelerator was commissioned.

Lastly, the Foundation coordinated with the IAEA in Laos to support the country's only radiotherapy centre at Mittaphab Hospital, where no suitably qualified physicist has been available since August 2024. Three ACPSEM-certified ROMPs recruited by APSIG provided the necessary physics services to ensure the safe delivery of radiotherapy to patients according to required standards.

VALE, **LYN OLIVER AM**

In 2025, we informed members of the passing of Associate Professor Lyn D Oliver AM, one of the most influential figures in medical physics in Australia and a cornerstone of the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM).

Lyn was instrumental in shaping the College from its earliest days, serving as part of the steering committee that founded ACPSEM. His contributions to the profession spanned decades, beginning as Honorary Secretary in 1978 and continuing until 2023, when he concluded his tenure as a Board member of the ACPSEM Foundation. His impact on medical physics and the College is immeasurable, and his legacy will continue to influence generations to come.

Among his many achievements, Lyn played a key role in the development of the accreditation system for medical physicists through ACPSEM in 1985, a foundational step in ensuring the highest standards of professional practice in the field. He was a skilled administrator who also served as College President from 2004 to 2005, a period marked by intense advocacy for healthcare improvements, particularly in cancer care, during the time of the Baume Inquiry. His leadership helped secure much-needed federal funding, strengthening the College and supporting the broader medical physics community.

In addition, Lyn drove the initiative to establish Medical Physics as a separate classification of scientist in the hospitals in recognition of the high levels of attainment that the practice required which led to the establishment of an industrial award in NSW that encouraged accreditation of medical physicists to elevate the standard of the profession in line with the recommendations of the Baume Report.

Beyond his contributions to ACPSEM, Lyn was widely recognised for his dedication to the field of radiation oncology. His service was formally acknowledged in 2011 when he was appointed a Member of the Order of Australia (AM) for his contributions to medical physics and professional associations, including his executive roles within ACPSEM.

Lyn's passing is a tremendous loss to our community, but his contributions and leadership will continue to inspire us. Lyn was a visionary and truly a giant of our field and we who follow are privileged to be able to stand on his shoulders.

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