



Probus Club of Sydney

www.sydneyprobust.org

Newsletter

Private and confidential – for Probus use only and not to be used for any other purpose

November 2026

Issue 492

MEETING DATES

10 November 2026

MATHEMATICS FOR QUANTUM ERA SECURITY AND TRUST

Professor Nalini Joshi AO
Chair of Applied Mathematics
University of Sydney

1 December 2026

TENNIS TODAY

Steve Healy
Past President of Tennis Australia

ACTIVITIES

4 November - Tour of the
The State Theatre

7 December – Christmas Lunch
Royal Sydney Yacht Squadron

CONTENTS

November Guest Speaker
October Meeting Report
October Guest Speaker Report
Social Activities Program
Book Review
A Touch of Humour

FROM THE PRESIDENT

Gentlemen,

At our meeting on 6th October, we heard three engaging “Life Before Probus” presentations:

Richard Brittain outlined his extensive educational qualifications, including: Bachelor of Science in Pure and Applied Physics, Legum Baccalaureus, (Bachelor of Laws), Postgraduate Diploma in Legal Practice, Master's Degree in Physical Methods of Analysis, PhD in Electrical Engineering and Applied Physics, Chartered Engineer, Physicist and Scientist. His achievements included Australia's 1997 adoption of Coordinated Universal Time (UTC), replacing Greenwich Mean Time (GMT), along with many other career highlights.

Stuart Westgarth described his beginnings on the land near Scone and his subsequent distinguished career in law, primarily in litigation, including a term as President of the Law Society of NSW. He also serves as a Deputy President of the New South Wales Civil and Administrative Tribunal (NCAT).

Alan Farrell spoke about his fascinating career in radiology at Royal Prince Alfred Hospital and later in private medical practice.

In the speaker segment, Aidan Morrison presented a detailed analysis of the economic and engineering challenges of Australia's energy transition, particularly the need for a “backbone transmission system” and the mismatch between energy generation and delivery to end users.

We currently have 153 members, and 84 people attended our most recent meeting.

Rod Binsted.

President

**** THE NOVEMBER MEETING WILL BE HELD ON
TUESDAY 10 NOVEMBER 2026 ****

Note: To Register to attend the 10 November 2026 Probus Meeting at the Union, University and Schools Club, along with any male guest you plan to host - [click here](#)

10 November 2026

MATHEMATICS FOR QUANTUM ERA SECURITY & TRUST

Professor Nalini Joshi AO

Chair of Applied Mathematics, University of Sydney



When powerful quantum computers are operational, smartphones in our pockets will be replaced by quantum devices and cash will be replaced by quantum money. New products will be found to drive our vehicles, fertilise our crops and improve our health in ways we cannot yet imagine. This promise has resulted in companies and governments across the world significantly increasing their investments in quantum computing and AI.

Meeting this demand presents diabolical challenges. Powerful quantum computers will be able to break widely used cryptographic protocols. The Australian Signals Directorate has recommended that the current protocols used in billions of transactions a day be removed and replaced with new ones by 2030. Unfortunately, the recommended algorithms are not fit-for-use in all settings and there is no guarantee that they will survive future attacks.

Professor Nalini Joshi discusses these challenges and describes why the resolution of these challenges lies in mathematics.

Nalini Joshi received her PhD from Princeton University with Martin Kruskal as her advisor. She is Chair of Applied Mathematics at the University of Sydney. Her research focuses on integrable systems, including the Painlevé equations, lattices and geometric asymptotics. Nalini was elected to the Australian Academy of Science as a Fellow in 2008, awarded a Georgina Sweet Australian Laureate Fellowship in 2012 and appointed Officer of the Order of Australia in 2016. She was President of the Australian Mathematical Society, Vice-President of the International Mathematical Union and is currently a member of its Executive Committee.

Geoffrey McWilliam
Speaker Co-ordinator

OCTOBER MEETING REPORT

President Rod Binsted opened the meeting and welcomed members and guests to the 6th October 2026 meeting of the Probus Club of Sydney. The President remarked that it is very strange that we have a month that is named after eight, but is in fact the tenth month of the year! All to do with the Julian calendar which was modified to the Gregorian calendar incorporating an extra two months at the start of the year, pushing October back from eighth to tenth month! Anyway, that's the way things happen!!

- The only event of note that happened on 6 October was in 1976 when the Gang of Four were arrested in Beijing, resulting in the start of the Communist Party of China running a capitalist society under the leadership of Deng Xiaoping.

Ten guests were welcomed to the meeting.

Geoff McWilliam provided his speakers' report;

- Speaking today, will be Aidan Morrison – Director of Energy Program at the Centre for Independent Studies to provide insights into the true costs of energy.
- On 10 November Professor Nalini Joshi AO, Chair of Applied Mathematics, University of Sydney will be explaining to us why AI works and where it might take us.
- At the December meeting, Steve Healy, will talk about his role as Past President of Tennis Australia.
- Geoff also reported that he has started working on the speakers' program for 2027. Members are encouraged to contact Geoff regarding potential speakers who are absolute leaders and good speakers in their area of expertise.

Peter Nochar updated us on the activities program for the next few months including:

- A visit to the State Theatre will take place at 10:00am on 4 November. This is a guided tour and will include the history, the artwork and behind the scenes
- On 7 December, the Christmas Lunch will be held at the Royal Sydney Yacht Squadron, Kirribilli.

For further information see the Activities section below and Club emails/website.

UNION, UNIVERSITY & SCHOOLS CLUB CHARGES

From 1 October 2026, card payment surcharges will no longer be available in Australia. This follows the Reserve Bank of Australia's decision earlier this year, which applies to every business that accepts card payments. These surcharges were to offset the cost of fee charges from our card charging provider, Square. To enable the Club to recoup these costs, there is a need to make a small increase to lunch charges. The new charges are listed below, effective as of our meeting on Tuesday 6 October 2026:

Entree only: \$23.00

2 Entrees: \$35.00

Main Course: \$33.00

2 Courses: \$47.00

Wine: \$13.00

Robert Warburton

Dr Richard Brittain



Richard commenced by thanking members for welcoming him into the Club. He revealed a caveat that he is still living within the Protestant work ethic. Richard's life started in Swansea Uplands a stone's throw from where the late, great Dylan Thomas was born. It developed into an unfashionable part of South London, known at the time principally as the largest railway junction in the world and also where John Wesley, Charlie Chaplin and David Bowie originated.

Richard came to Australia as a skilled migrant about 40 years ago. He worked in the science sector and latterly as a lawyer. Starting in commercial research and development, particularly medical imaging equipment based on ultrasound. He has worked with ANSTO, CSIRO,

the National Standards Commission and the National Measurements Institute where he worked on infrastructure arrangements for the transition of time measurements from astronomical observations (GMT) to atomic clocks (UTC). Time is the most accurately measured physical quantity with an uncertainty of 1 part in 10 to the 18! Time is vital for the communication and navigation. Other projects include the formation of the National Measurement Institute in 2004.

Since 2015 Richard has been the Principal Solicitor and a Notary Public at RHB & Associates Legal and Technical Consulting Services – a boutique law practice specialising in matters at the science/law interface, IP law, with an emphasis on patents. Also weights & measures – all about the buying and selling of goods through measurement which is used in determining the consideration for the goods or tax payable. He has provided expert evidence in RADAR and LIDAR vehicle speed measurement and breath analysis.

He has been a duty solicitor at the Downing Centre Court for over ten years, a technical auditor for NATA for nearly 30 years, has worked for the UNIDO, EU, PTB and DFAT to assist developing nations frame legislation at the science/law interface. He has written many wills, appeared in many civil, NCAT, traffic, drug and AVO matters up to and including the Supreme Court of NSW.

Richard has always kept an open mind and been interested in a whole range of things which have surrounded him from the artistic to scientific, from the creative to the analytical, from the present to the possible. He looks forward to sharing his experiences and enjoying the company of Probus Club members.

Stuart Westgarth



Stuart was born in August 1950. Looking back, it seems like an entirely different world. The US President was Harry Truman, the British Prime Minister was Clement Attlee and the Australian Prime Minister was Mr Robert Menzies. Five years previously, the War had ended following the dropping of two atomic bombs. Stuart was born in Scone, NSW where his grandfather as a young solicitor had set up his own practice. His father was a stock and station agent, who was required to move around NSW including Scone for a second time and Bathurst where Stuart was a student at All Saints Collage, then St Paul's College at Sydney University where he studied arts and law becoming admitted as a solicitor in

1975. He was also married to Marnie in 1975. They have four children and ten grandchildren, most of whom live in Sydney.

Stuart started work in 1973 with his cousin's law firm, Dudley Westgarth and Co. In 1993, the firm became known as Corrs Chambers Westgarth. Apart from working in London for a year, he worked for the same firm for 35 years. In London he worked for two firms which specialised in maritime and insurance law, experiences not readily available in Sydney. His personal area of specialisation was in commercial litigation, particularly in maritime law in the early years, later in banking litigation and later still for a group in the tobacco industry. He experienced a range of cases including in the Privy Council. Those on the bench included Lord Wilberforce and Lord Hailsham. He also had a couple of experiences in the High Court of Australia. He was also involved in a very lengthy case in the Federal Court in the United States, Washington DC Circuit experiencing the extensive use of depositions.

He was very fortunate to see in action and to some extent to work with some very well-known and inspiring Australian lawyers including; Murray Gleeson, Tom Hughes, Michael McHugh and Brett Walker from NSW and Alan Myers from Melbourne. In his fifties he became involved in Law Society politics and became the president in 2011. The big issue was whether the Law Society should continue to regulate the profession. The dispute was resolved with a compromise! Nowadays Stuart works part time at NCAT, which does a huge variety of work. The rest of his time is spent trying to improve his golf, play a bit of tennis and learning to play bridge. He enjoys watching rugby and test cricket and whatever grandchildren are playing. Stuart is honoured to become a member of Probus, providing intellectual stimulation and the opportunity to make new friends and catch up regularly with old friends.

Dr Alan Farrell



Alan commenced by acknowledging the elders in the room who have done so much for Australia. He grew up in Waverly and surfed at Bronte and was the eldest of six children. His father was a teacher and later headmaster at Matraville High where he taught Eddie Jones, the Ella brothers and so on. He said that Eddie was the smartest kid that he ever had! There you go! Alan was admitted into medicine when he was 15 but took a year off and made a nuisance of himself, so was culled early on. He then had a variety of jobs from builder's labourer to clerk at the Conciliation and Arbitration Commission. Next was teaching science and maths at a country high school, although unqualified to do so. His screening interview was on a Friday – did he speak English and was he sober at the time? – his first class

was on the following Monday at age 20, marginally older than his students! After a few weekends he joined the rugby club which led to a plethora of activities, and was even selected as a young Country Party delegate for the NSW conference, having previously been on the executive of the Labour Club at Sydney Uni!

Returning to medicine in 1970, Alan met a great bunch of people who remain friends. He also enthusiastically picked up skiing and white-water kayaking. His current physical state is because he has not been overburdened by too much common sense, having had a couple of sporting accidents recently breaking his hip and four ribs. The one before being a bit more serious.

Alan met his wife Christina during his medical studies – a wonderful woman. She was doing a science PhD at the time. They have been married for 53 years with four children and eight grandchildren.

He continued his medical studies and in the subsequent residency studied radiology as a post graduate speciality which he found diverse and interesting. He joined a small radiology practice which over the years became the largest radiology practice in Australia. It was listed on the ASX in 2000, but that proved to be a rocky road and the company was taken private and has been through several ownership changes since. Alan retired about nine or ten years ago. For philanthropy they supported a medical research institution at Sydney University, but the University no longer takes money from Paul Ramsey.

Alan and his wife enjoy travel to cold and wild places, but this is becoming harder. He has an amateur interest in economics, manages his own investments and a continuing interest in science, particularly biology. Alan and his wife play bridge and he has developed an interest in history. He has an eclectic wine cellar where he enjoys solving the problems of the world with friends. He thanks to John O'Connor for nominating him.

AUSTRALIA'S ENERGY PROGRAM

**Aidan Morrison, Director of Energy Program,
Centre for Independent Studies**



Introduced by Geoff McWilliam, Aidan Morrison made a very detailed and carefully reasoned presentation on Australia's current energy transformation program. He argued that Australia's energy transition will prove significantly more expensive than governments and official planning assumptions have suggested. Aidan's focus is not simply on the cost of wind and solar generation, but the much larger system including storage, firming, redundancy, transformer and network stability equipment required to make intermittent generation reliable.

THE ORIGINAL ECONOMIC PROMISE

Aidan reminded us that Australian governments have repeatedly presented the renewable energy transition as an economic opportunity including lower electricity prices improved competitiveness and economic growth, as well as a climate policy. He argues the policy should be judged against its claimed economic objective ie does it actually produce affordable and reliable electricity?

COSTS HAVE RISEN SIGNIFICANTLY

Aidan contrasts earlier cost estimates with more recent ones. He cited an earlier claim that new zero-emissions supply, including firming, could be delivered below about \$70/MWh; a later CSIRO figure was \$150/MWh. EnergyConnect is another example of project-cost escalation - it was initially discussed at about \$1.5 billion and subsequently reached around \$4.1 billion.

THE 'RENEWABLE ENERGY HONEYMOON'

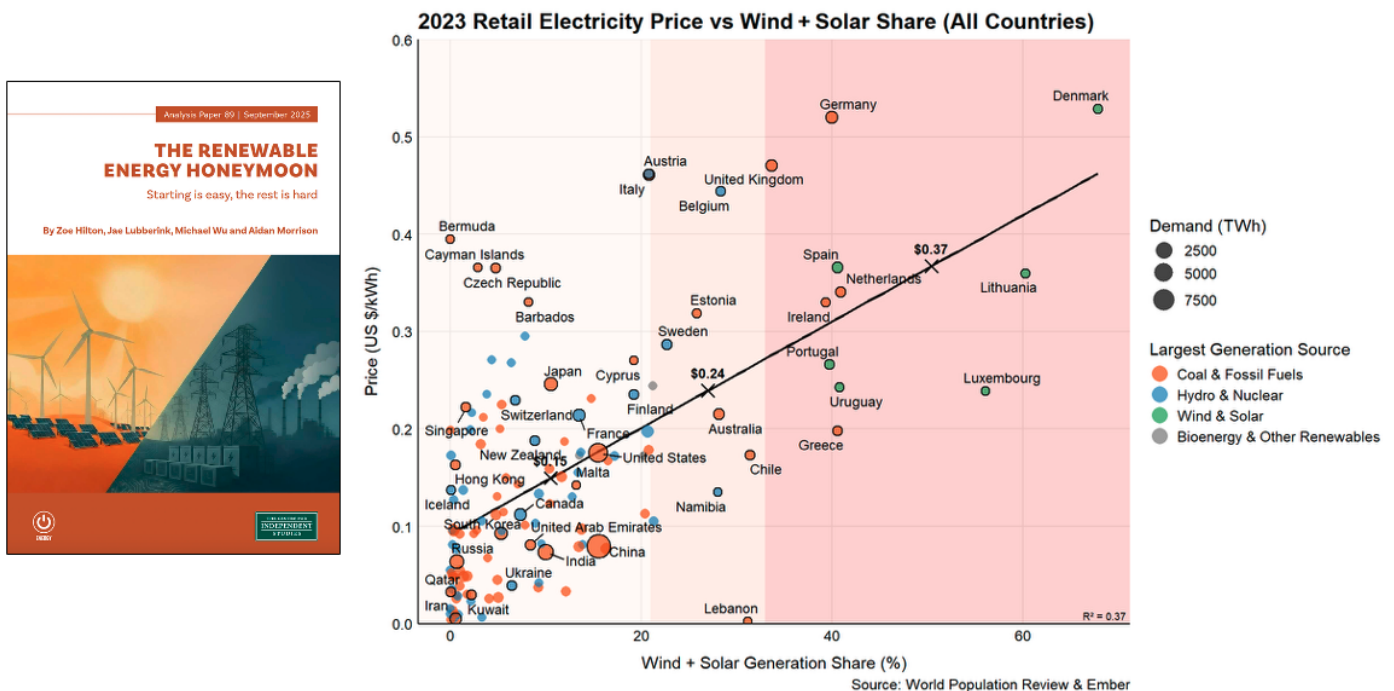
Aidan commented that adding a modest amount of wind and solar to a system can appear inexpensive and manageable, but the economics become progressively harder as their share of the system rises.

Solar output follows daylight hours and wind output varies with weather. As renewable penetration increases, electricity increasingly has to be moved through space and time and that requires additional transmission, storage and firming infrastructure. The cost of the complete electricity system, not just of generation, is the important measure. Lower wholesale generation costs do not necessarily translate into lower consumer bills once transmission, storage, firming and other fixed system costs are included.

KEY TAKEAWAYS

- Renewable generation is only one component of the electricity system.
- Aidan believes the system costs of integrating large amounts of intermittent generation have been underestimated.
- His principal test for energy policy is ultimately the cost and reliability of electricity delivered to consumers.

No one has ever made low-cost energy from wind and solar



THE PROPOSED NATIONAL TRANSMISSION BACKBONE

Australia's current energy planning envisages a high-voltage north–south network linking the eastern states, with Renewable Energy Zones connecting into it. The idea is to move electricity between regions so that different weather conditions eg sunny in Queensland, windy in another state, and low renewable output in another, can balance one another and reduce the need for standalone storage or backup.

Aidan questions whether this concept is appropriate given Australia's geography ie a long, relatively thin population concentrated along the east coast rather than the dense, interconnected load and generation patterns found in Europe or parts of Asia.

He also argues that a reliable high-voltage system cannot consist of one simple 'backbone'. Electricity networks require redundancy so that a fault in one major circuit does not overload the remaining network.

Additional costs arise from parallel circuits, alternative corridors, large transformers, connection hubs and equipment such as synchronous condensers that maintain voltage and system stability. One respected analyst estimates the backbone would cost \$70 billion and add \$600 to consumer bills. Aidan's estimate is higher. He uses the Central West Orana Renewable Energy Zone as his benchmark, citing approximately \$75 million per kilometre for its heavy 500 kV infrastructure. He argues that this provides a more realistic guide than some lower official project estimates

ESTIMATED CONSUMER IMPACT

Using assumptions including a 9% cost of capital, a 50% expansion from contracted costs, 2% maintenance and 3% depreciation, and the Central West Orana benchmark, Aidan estimates that the committed transmission program across NSW, Victoria and Tasmania could ultimately have a consumer impact of about \$2,000 pa

He describes current project cost overruns as only the 'tip of the iceberg', because much of the ultimate network which he believes will be needed has not yet been fully committed or costed.

What does it cost? About \$2000 on household bills

Bill Impact Scenario	Construction Overrun	Nominal WACC	Operations and Maintenance	Depreciation	Annual Payment on Capital
Low	25%	6%	1%	2%	9%
Central	50%	9%	2%	3%	14%
High	75%	12%	3%	4%	19%

States with taproot	Trunk Length (km)	% of NEM energy	Contract Spend (\$b)	Actual Spend Central (\$b)	Bill Impact Low	Bill Impact Central	Bill Impact High
NSW, VIC, TAS	2159	64%	163	244	\$1,033	\$1,928	\$3,053
QLD	1522	30%	115	172	\$1,555	\$2,902	\$4,594
NSW, VIC, TAS, QLD	4297	93%	324	486	\$1,400	\$2,613	\$4,138

COAL AS A BRIDGE AND NUCLEAR AS A LONG-TERM OPTION

Aidan argues that existing coal-fired power stations should not be retired prematurely if they can be technically and economically refurbished. He says operators need 10–15 year extensions rather than short two-year extensions to justify major investment in maintenance and refurbishment. He acknowledges that ageing components — particularly boilers — can eventually require major replacement. However, he believes many plants could continue for much longer if investment is supported by sufficient operating certainty.

On nuclear power, his position is that it is the most technically credible large-scale option for achieving low-carbon electricity while retaining firm, continuous generation. He deliberately focuses less on nuclear because he first wants the costs of the renewable system to be honestly assessed.

WHAT CONSUMERS ACTUALLY PAY FOR

Aidan estimates that approximately 35% of the current electricity bill represents wholesale electricity generation. He puts distribution at roughly 35–40% and transmission at approximately 7–10%. He comments that a component currently representing roughly 7–10% of the bill could potentially become a much larger share — potentially approaching 50% under the system he is modelling.

ROOFTOP SOLAR AND HOUSEHOLD BATTERIES

Aidan comments that solar and battery popularity has been encouraged by subsidies, favourable tariffs, falling equipment costs and rising electricity prices. His concern is that solar households can reduce their purchases from the grid without eliminating the fixed cost of maintaining poles, wires and network capacity that needs to be retained. The network still has to be capable of supplying households when solar output and batteries are insufficient, often when many customers need electricity simultaneously. Who pays for the fixed system?

DATA CENTRES AND AI

Aidan commented data centres could potentially be beneficial because additional demand can create economies of scale if it is well located and has a predictable load profile. The argument that data centres are highly flexible loads that can simply switch on when renewable electricity is abundant and switch off when weather conditions change is not correct. Conventional computing demand may be relatively steady, though AI training can create abrupt changes in demand.

POLICY POSITION

Our speaker's conclusion is that Australia should stop and reassess the current energy rollout rather than continuing with the assumption that renewable energy will automatically produce cheaper electricity.

He argues that existing coal generation should be retained where technically feasible, that major refurbishment should be supported by longer operating commitments, and that Australia should consider nuclear if it genuinely wants a low-carbon electricity system.

Most importantly, he calls for an explicit political conversation about the cost of decarbonisation. If Australians decide that reducing emissions is worth paying a premium for, then the premium should be openly acknowledged.

VOTE OF THANKS

In thanking our speaker Past President John Doherty reinforced the importance of the cost of electricity impacting economic prosperity. The policy challenge is therefore to reconcile Australia's environmental objectives with the need for reliable and affordable electricity.

Alan Locke

SOCIAL ACTIVITIES PROGRAM

RECENT EVENTS

Visit to the Historic Parramatta Female Factory

- **Thursday 15 October 2026**

Fourteen members and their guests gathered on the outskirts of Parramatta and were met by our tour guide dressed in apparel appropriate to the occasion. For two hours we were shown around the grounds and the many well-preserved fine sandstone buildings. The earliest were built in the time of Lachlan Macquarie's governance and were initially used to house many of the less fortunate females of the colony of NSW. Although providing employment, a hospital, a source of servants and wives for the colonists, the

conditions were exceptionally harsh. After the end of the convict period, and with further building, the site became a “lunatic asylum” (with harsh conditions continuing). Thankful for having not lived in those times, we finished with a good lunch at the Havenstone café, which is on-site and is recommended.



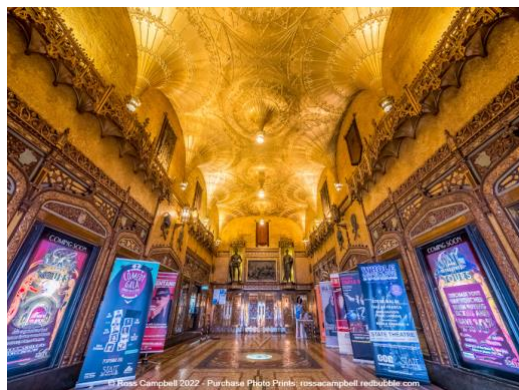
The site and buildings are very well maintained (courtesy of the NSW Government) and there is a well organised group of volunteers who are committed to preserving this aspect of our history. It's well worth a visit.

Bob Eckstein

FUTURE EVENTS (Please see the website & emails for further details and bookings)

A Tour of the Historic State Theatre, Market Street, Sydney. Wednesday 4 November 2026

Experience the Majestic Elegance



Since its opening in 1929, The State Theatre in Market Street, Sydney has captivated the hearts and minds of patrons with its majestic elegance. Join in a guided tour of this magnificent and unique building and discover why it's known as the Palace of Dreams. During a fascinating tour, you will:

- Experience the grandeur of standing in a 2000 seat auditorium beautifully framed by 13 hand-cut crystal chandeliers
- Observe the eclectic elements of the Theatre's Gothic, Italian and Art Deco design
- Be mesmerised by the world's second largest hand-cut crystal chandelier, the Koh-i-Nor

- See the original mighty Wurlitzer Organ, the voice of silent movies (pending availability) and more.

Recognised for its great historical significance and high architectural quality, this is your chance to be enchanted by the State Theatre Sydney.

The following is from the State Theatre: "Our tours are not recommended for anyone with mobility issues. There are 80 – 100 stairs spread throughout the tour. The most stairs at a time are 25.

We do not have any elevator access around the venue."

The cost per person is \$20.

We will meet at 9.45 at the State Theatre in Market St. The tour starts at 10.00 am. We plan to have lunch afterwards nearby at a venue to be determined.

Organiser: Peter Nochar M: 0401 424 400

Christmas Lunch – Royal Sydney Yacht Squadron – 7 December 2026

***** SAVE THE DATE*****



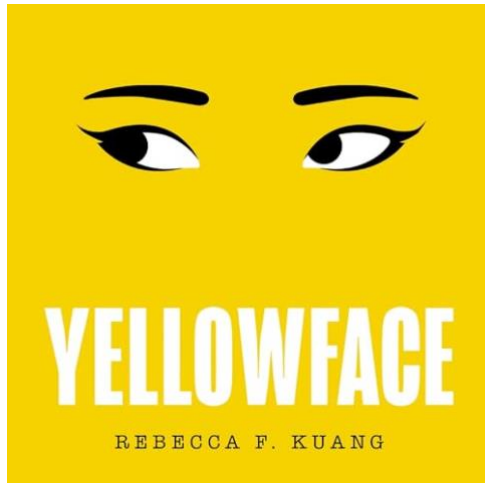
The Royal Sydney Yacht Squadron is one of the Australia's most prestigious clubs nestled along the picturesque shores of Sydney Harbour and steeped in sailing history, providing a welcoming atmosphere for all, our venue for the always popular Christmas Lunch on **Monday 7 December 2026**.

Kim Oates, Bob Eckstein & Peter Nochar
Activity Coordinators

BOOK REVIEW

YELLOWFACE

by Rebecca F Kuang (2023) – 322 pages – Fiction



Have you ever wondered what makes a modern best seller? What goes on behind-the-scenes between author, agent, publisher and others? Or is it just sheer talent, timing or luck?

This book asks the questions and provides some answers. Throw in plagiarism, racism, cultural appropriation and online trolling and you have a heady mix – just made for modern audiences.

However, it is a compelling read, even though it may mean more to younger generations. The skilful combination of plagiarism, racialism, publishing and the twitterverse took this book to

the top of the New York Times bestseller list and it is still controversial. Plenty of swear words and modern language – but this is what young people are reading and this is the direction in which the modern novel is travelling.

David Castle

A TOUCH OF HUMOUR!

Exercising the Mind!



Parenting Pains!



"You can come down now, Everett.
The children have grown up and left."

Another Blonde Joke!

Last year I replaced all the windows in my house with those expensive, double-pane, energy-efficient kind. Today, I got a call from Home Depot who installed them. The man complained that the work had been completed a year ago, and I still hadn't paid for them.

HHHelloo.....just because I'm blonde doesn't mean that I am automatically stupid. So, I told him just what his fast-talking sales guy had told me last year... that these windows would pay for themselves in a year.

Hellooooo, it's been a year, so they're paid for, I told him. There was only silence at the other end of the line, so I finally hung up. He never called back. I bet he felt like an idiot!!!

HOW TO CONTACT A COMMITTEE MEMBER

To contact any committee member [Click here](#)

Please use email where possible or telephone if you require urgent contact.