



The Royal Society of Victoria

Promoting science and science education



PATRON: The Hon Alex Chernov AC QC
Governor of Victoria

PRESIDENT: Dr Bill Birch AM BSc (Hons) PhD

Headlines...

**Nominations are open for the 2015
RSV Medal for Research Excellence**

12th February Prof Patrick McGorry, Orygen, National
Centre of Excellence in Youth Mental Health will present
a lecture titled:

Youth Mental Health: Our Best Buy in Healthcare

26th February Prof Peter Taylor, Department of
Mathematics & Statistics, University of Melbourne will
present a lecture titled:

'Queueing Theory and "Ideal Hospital Occupancy'

Advance notice...

23rd April: Annual General Meeting at 6:30pm

February 2015 Newsletter

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February Meetings

Youth Mental Health: Our Best Buy in Health Care

The first 2015 meeting of the Royal Society of Victoria will be held at the Society's Hall on **Thursday 12th February 2015 at 7.00 pm.**

Speaker: Professor Patrick McGorry AO
Orygen National Centre of Excellence in Youth Mental Health



Renowned psychiatrist and celebrated champion of early intervention in mental health Professor Patrick McGorry AO will outline how renewed investment in this deteriorating sector could mitigate a raft of ongoing physical and mental conditions for patients later in life, relieving the downstream burden of illness on society.

Join the 2010 Australian of the Year to learn how new structures, resources, treatments and skillsets could transform our youth mental health sector to secure lifetimes of wellbeing for young people at risk.

Queueing Theory and 'Ideal Hospital Occupancy'

The second meeting in February will be held at the Society's Hall on **Thursday 26th February at 7.00 pm.**

Speaker: Professor Peter Taylor
Department of Mathematics & Statistics,
University of Melbourne



In a 2004 report "Access block and overcrowding in emergency departments", the Australasian College for Emergency Medicine made the statement:

"Queueing theory developed by Erlang nearly 100 years ago tells us that systems are most efficient when they operate at 85% capacity. This applies to queues at the local bank waiting for the teller or at ticket booths at the MCG".

In this talk Prof Taylor will discuss both the motivation and the science behind this statement in particular, explaining how it relates to queueing in emergency departments and the concept of 'ideal hospital occupancy'.

Pre-Lecture Refreshments

If you plan to attend refreshments prior to the lecture on either 12th Feb or 26th Feb (cost \$20 per person), please contact us to register so we can arrange appropriate catering (phone: 9663 5259 or email rsv@sciencevictoria.org.au).

Presentation of 2014 Research Medal



Photo: 2014 Medallist Prof Jane Visvader

The Society was delighted to have the Honourable Alex Chernov AC QC, Governor of Victoria and Patron of the Society present the Royal Society of Victoria 2014 Medal for Excellence in Scientific Research in the Biological & Health Sciences to Professor Jane Visvader of the Walter and Eliza Hall Institute of Medical Research.

The lecture was well attended and Professor Visvader captured the audience with her discussion of 'Defining the Cellular Culprits Underlying Breast Cancer'. Professor Visvader and 42 other diners then enjoyed the President's Soiree and dinner – a fitting end to a busy and successful year for the Society.

Council Election 2015

There were nine valid nominations for the ten vacancies on Council declared in the November 2014 Newsletter. In consequence, no election is necessary and the following Members will take up their positions as Councillors after the AGM on 23rd April 2015.

President: Dr William Birch AM BSc (Hons), PhD

Vice-President: David Zerman MPH FFIA CFRM FAIM

Honorary Secretary: Nicola Williams BSc, DipEd, MSc FRACI.

Honorary Treasurer: Norman Kennedy, BEng(ComEng), MSc(Comp)

Prof. Graham Burrows AO, CJCJ, BSc, MB, ChB, DPM, MD, Grad DipMHlthSc(Clinical

Hypnosis), DSc, FRANZCP, FRCPsych, MRACMA, FACHAM

Dr Peter G. Baines, BA(Hon), BSc(Melb), PhD(Cantab)

Helen J. Gardiner, BA, CertIV Workplace Training

Prof. Sandra Rees, BSc(Hons), MSc, MPhil, PhD, DSc

Dr Mark Williams, BSc, MSc, PhD

The Society notes with gratitude the work of Prof Pauline Ladiges AO, Dr Tom Darragh, Dr Diane Lightfoot, Malcolm Carkeek, Dr David Churchill and Lt Col Richard Lightfoot (Retd), all of whom will retire from their current positions at the AGM in April.

2015 Royal Society Medal for Excellence in Scientific Research

Nominations are called for research excellence in Category III Earth Sciences. This category includes research in the disciplines of Geology, Geochemistry, Geochronology, Geophysics, Planetary Physics, Meteorology, Oceanography, Physical Geography, Palaeontology and related sciences for work published between 1st January 2005 and 31st December 2014.

Nominations close on **31st March, 2015**. See the 'Awards' page of the website at <http://www.royalsocietyvictoria.org.au/awards-and-prizes/> for the instructions for nominators.

From the President

I welcome all Society members to the first newsletter of 2015 and hope everyone has had an enjoyable and relaxing break from the usual routine. The New Year has brought some positive developments for the Society but also some bad news. Members will be very concerned to hear that James Macarthur is back in hospital after a reoccurrence of his illness and is currently undergoing intensive treatment. We all extend our sympathy to James, Amanda and the children during this testing time and hope that James makes a full recovery. In his absence we will have to make adjustments to many of our activities, so I hope members will appreciate the situation. If you feel that you could help out in any way please let us know.

On the plus side, the Society warmly welcomes Michael Flattley as our new Executive Director. Mike has had a career in senior management at the University of Melbourne for the past 14 years. He has extensive experience in

institutional governance and operational management, as well as leadership in organising major public programme events such as the 2013 Festival of Ideas and the 2014 Cultural Treasures Festival. Of particular significance for the Society's future directions, Mike is a strategic thinker who has expressed a strong interest in promotion of science to the general public. He is also an effective communicator with a solid grounding in social media. I'm sure Mike is looking forward to meeting members, so please take the opportunity to introduce yourself.

Members who've checked out this year's lecture programme will have realised how diverse and interesting it is, starting off with an address by Professor Patrick McGorry on February 12. Attendances at our twice-monthly lectures have been exceptional and we hope that this continues. Not everyone has been on vacation during this period, as a group of volunteers under the guidance of Martin Harris has successfully launched the 3-month CoderDojo programme of computer classes for children and young teens. A report on progress appears elsewhere in this newsletter.

Thanks to all those members who have renewed their membership and provided donations to assist our scientific programmes. Let me assure you they will be put to good use.

Bill Birch

Australia Day Honour for RSV Member

Distinguished Fellow of the Royal Society of Victoria, Professor Milton Thomas Hearn was honoured as a Member (AM) in the General Division of the Order of Australia this year "for significant service to science through major contributions to advances in chemical manufacturing." Hearty congratulations!

Nominations for RSV Membership

A nomination for membership of the Society has been received on behalf of:

Ms **Victoria LYNCH**, Pharmacologist and Toxicologist

Unless Members request a ballot, the nominee will be considered for election at the Council meeting on 12th February and if elected, will be announced at the Ordinary Meeting of the Royal Society of Victoria held that evening.

Publish in The Proceedings:

Invitation to Members

To broaden the scope of our journal *The Proceedings of the Royal Society of Victoria* at the international level, we are inviting members to submit a paper as sole author or in collaboration with colleagues. In addition, we urge you to encourage your research students to submit a research article or review. We seek contributions in all areas of science.

Donations

Council thanks all Members who have continued to support the Society; particularly those who have renewed their membership for the 2015 year promptly.

Members are reminded that donations made to the Royal Society of Victoria are tax deductible and we are particularly grateful to Members who have already donated to support the annual Young Scientist Research Prizes. Please consider doing the same when renewing your membership.

Donations are very welcome and can be made at any time.

Fundraising for Young Scientist Research Prizes

The Young Scientist Research Prizes are awarded to doctoral students on a competitive basis each year. They are supported by donations from members and the money we raise from allowing the public to park in the Society's grounds during the **Melbourne International Flower and Garden Show**.

If you can assist directing cars to parking for half a day on any of **26, 27, 28 or 29th March**, please contact the Society (on 03 9663 5259) and leave your details, contact number and roster timeslot preferences.

We need three people on duty if we are to cover each shift adequately – times are 9:30am to 12:00pm and 12:00pm to 3:00pm.

CBD Parking

The cost for members to park at the Society remains very cheap - free for the first two hours and **\$15.00 for the day** for parking between **8.00am and 5.00pm**. Please just call into the office when you arrive so that we are aware of your vehicle.

After hours or weekend parking is by arrangement only.

Parking is **not available** on **Tuesday evenings** due to bookings for the entire building.

Books for Sale

To purchase any of these books contact the office on Tel. (03) 9663 5259 or email rsv@sciencevictoria.org.au We accept Visa, MasterCard and cash. Prices below are for the book only. Variable postage and handling costs apply, or you can collect your selection from the office.

Title	Author	Stocks & Price
Topographic Effects in Stratified Flows	Peter G Baines (Paperback edition)	1 copy \$80.00
Gemstones in Victoria	William D Birch & Dermot A Henry (Revised 2013)	\$29.95
Volcanoes in Victoria	William D Birch (Revised ed. 2009)	10+ copies \$17.10
The Yarra: A natural treasure	David & Cam Beardsell (1999)	10+ copies \$15.75
4Es: Ethics, Engineering, Economics and Environment	John St.J S Buckeridge (2008)	4 copies \$25.00
The Aboriginal Story of Burke & Wills: Forgotten Narratives	I D Clark & F Cahir (Editors) (2013)	10+ copies \$59.95
Uncharted Waters	Daniel Connell (Ed) Murray-Darling Basin Commission (2002)	5 copies \$10.00
Finding in the "Mock" Coronial Inquest into the deaths of Robert O'Hara Burke, William John Wills, and Charles Gray	Coroner: Dr J Hendtlass (2012)	Numbered limited edition \$20.00
Discovering Mt Buffalo	Philip Ingamells (1999)	4 copies \$14.00
Burke & Wills: The scientific legacy of the Victoria Exploring Expedition	E B Joyce & D A McCann (Editors.) (2011)	10+ copies \$59.95
Still Glides the Stream: The natural history of the Yarra from Heidelberg to Yarra Bend	Geoff Lacy (2004)	2 copies \$38.50
You Have to be Lucky – Antarctic and Other Adventures	Phillip Law (1995)	2 copies \$20.00
The Last of the First CSIRAC: Australia's First Computer	Doug McCann & Peter Thorne	10+ copies \$22.00
The Alps in Flower	I R McCann 4 th edition (2001)	1 copy \$15.00
Education, Antarctica, Marine Science and Australia's Future, Proc. of the Phillip Law 80th Birthday Symposium	J L Mentha & G F Watson (Eds.) (1992)	7 copies \$8.00
A Man for Antarctica – The early Life of Phillip Law	Kathleen Ralston (1993)	3 copies \$25.00
Phillip Law The Antarctic Exploration Years 1954-66 (signed by P G Law)	Kathleen Ralston (1998)	2 copies \$30.00
Spiders & Scorpions Commonly Found in Victoria	Ken L Walker, Alan L Yen & Graham A Milledge (2003)	10+ copies \$16.10
SPECIAL EDITIONS - SYMPOSIA		
Strzelecki International Symposium Permian of Eastern Tethys (Dec 1997)	Vol 110/1&2	8 copies \$45.00
Mt. Elephant and Basalt Plains: A Natural and Social History Seminar (Oct 2001)	Vol 113/2	20 copies \$30.00
Symposium Planning, Transportation and the Melbourne Lifestyle (March 1999)	Vol 114/1&2	20 copies \$30.00
Environmental History of the Newer Volcanic Province of Victoria (Nov 2004)	Vol 116/1	8 copies \$30.00
Barmah-Millewa Forest: Indigenous Heritage, Ecological Challenge (June 2005)	Vol 117/1	10 copies \$35.00
3rd International Symposium on the Silurian System (The Sir Frederick McCoy Symposium) (December 2005)	Vol 117/1	10 copies \$35.00
The Victorian Mallee Symposium (Sept 2005)	Vol 118/2	10 copies \$35.00

2015 Meeting Program

Lectures start at 7.00 pm unless otherwise stated, in the Ellery Lecture Theatre at 8 La Trobe Street, Melbourne			
Date		Speaker	Title of Presentation
February	12	Professor Patrick McGorry <i>Orygen, National Centre of Excellence in Youth Mental Health</i>	Youth Mental Health: Our Best Buy in Health Care
	26	Professor Peter Taylor <i>Department of Mathematics & Statistics University of Melbourne</i>	Queueing Theory and 'Ideal Hospital Occupancy'
March	12	Dr Euan Ritchie <i>Faculty of Science, Engineering & Built Environment, Deakin University</i>	Best friends or mortal enemies?: The complex ecological roles of Australia's predators
	26	Dr Robyn Ariarhod <i>Adjunct Research Fellow, School Mathematical Science, Monash University</i>	Celebrating Maxwell – and scientific curiosity
April	9	Professor Jenny Martin <i>School of Chemistry & Molecular Bioscience; University of Queensland</i>	Crystallography: Australia's Bragging Rights
	23	Annual General Meeting	Starts at 6:30 pm
May	14	Mr Christian Wallis <i>Principal Scientist & EPA appointed Auditor (Contaminated Land), Golder Associates Pty Ltd</i>	Beneath the Surface: Living with our Industrial Legacy through Urban Renewal
	28	Dr Bill Birch <i>Retired Senior Curator, Geosciences at Museum Victoria</i>	A W Howitt Lecture Victoria's Gemstones, much more than history
June	11	Q&A Panel Dr Gavin Mudd, Dr Graeme Weber, Chairman Mr Dennis O'Neill	Nuclear energy: should it be included in the mix?
	25	Ms Leonie Walsh <i>Lead Scientist, State Government of Victoria</i>	Science in my World Fundraising Lunch
July	9	Professor Sharon Lewin <i>Director, The Doherty Institute for Infection & Immunity</i>	Finding a cure for HIV – will it ever be achievable?
	23	Dr Ivan Williams <i>Australian Radiation Protection and Nuclear Safety Agency</i>	12.15 pm Lunchtime meeting Physics, Medicine, Radiation and culture: The Australian Dosimetry Service: progress and outcomes from the national radiation oncology dose audit.
August	13	Professor Jenny Marshall Graves AO FAA <i>Genetics Dept, La Trobe Institute for Molecular Science</i>	Joint meeting with RHSV
	27	Dr Jillian Garvey <i>ARC DECRA Fellow Faculty of Humanities & Social Sciences, La Trobe University</i>	12.15 pm Lunchtime meeting Extinct megafauna, camels and the Australian desert: The 2014 Simpson Desert Palaeontology Expedition.
September	10	Dr Alex Johnson <i>School of Botany, University of Melbourne</i>	Fortifying for the future: micronutrient-enriched cereals to improve global health
	24	Young Scientist Research Prizes	Note earlier start time of 6:30 pm
October	8	Associate Professor Mark Mcconnell <i>Research Centre for Urban Ecology, Royal Botanic Gardens</i>	The role of the science of urban ecology in creating green, healthy, resilient and liveable cities and towns in the future.
	22	The Phillip Law Postdoctoral Award	Winner to be announced
November	12	Dr Anita Hill <i>Executive Director, CSIRO Manufacturing, Digital Productivity and Services</i>	CSIRO Delivering Positive Impact
	28	Very Young Scientists <i>Event celebrating RSV sponsored Science Talent Search bursary winners</i>	Invitation only.
December	10	RSV Research Medal Lecture Earth Sciences	Winner to be announced