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# **OCTOBER NEWSLETTER**

## **Northern Branch October Lecture**

On Sunday 27 October, at 1.30pm at the QVMAG Meeting Room at Inveresk, **Prof Rufus Black**, **Vice Chancellor and President**, **University of Tasmania** will speak on *Ethics of place*.

Dominant modes of contemporary ethics and economics are antiplace. Indeed, the ideas that underpin contemporary ethics – utilitarianism and rights-based



models – inform today's globalised economy and its bias towards metropolitan rather than regional places. This lecture will trace these forces and propose that we turn to some pre-modern ideas to address this inequity by re-grounding our ethics and economics in place.

## Meeting Room, Inveresk QVMAG

**Prof Rufus Black** is the Vice-Chancellor and President of the University of Tasmania. Previously, he was Master of Melbourne University's Ormond College and an Enterprise Professor in the Department of Management and Marketing and a Principal Fellow in the Department of Philosophy at the University of Melbourne.

Prof Black holds degrees in law, politics, economics, ethics and theology from the University of Melbourne and Oxford University, where he studied as a Rhodes



# The Royal Society of Tasmania Lecture on Tuesday 5 November at 8.00pm

in the Royal Society Lecture Room
Customs House Building, entrance from Dunn
Place.

Open to the general public. Admission free.

## **UTAS** graduates presentation evening:

- Mr Habacuc Perez-Tribouillier: It's not only bad news: how radioactivity is used to study the ocean.
- Ms Luisa Fitzpatrick: Tail loss and telomeres in lizards.
- Mr Patrick Yates: Black holes and galaxy evolution in under 20 minutes.

#### Tail loss and telomeres in lizards



Luisa Fitzpatrick studied Marine Biology and Zoology at the University of Western Australia, where she then undertook her honours degree looking at sperm competition inbreeding in guppies with Prof Jon Evans and Dr Clelia Gasparini. She worked for an environmental consulting company for a few years and at the

Western Australian Museum, before moving to Tasmania to begin a PhD in the evolutionary ecology of lizards with Assoc Prof Erik Wapstra and Dr Geoff While.

Her thesis work focusses on senescence in ectotherms and the links between telomeres, temperature, reproduction and life history using the Tasmanian lizard *Niveoscincus ocellatus* as a model system.

During her PhD, Luisa spent six months working with Prof Mats Olsson and Dr Angela Pauliny at the University of Gothenburg in Sweden; attended several international conferences; was involved in organising and hosting several national conferences in Tasmania; and helped with fieldwork on wall lizards in Italy. **Abstract:** One aspect of lizard ageing that Luisa is particularly interested in is their ability to regenerate large portions of their body. Telomeres are protective caps on DNA that shorten with cell division and oxidative stress. Tissue regeneration such as regrowth of a body part may influence an organism's telomere length as growth can increase both cell division and oxidative stress.

By examining the effect of tail regrowth on telomeres in a lizard, Luisa and her colleagues found that telomeres lengthened in lizards with intact tails while oxidative stress decreased in those re-growing tails. This suggests that tail regeneration involves a response to oxidative stress which comes at a cost to telomere repair. This change in telomere maintenance demonstrates a potential long-term cost of tail regeneration.

# It's not only bad news: how radioactivity is used to study the ocean

Habacuc Pérez-Tribouillier has been interested in the ocean since an early age spending long days on the tropical beaches of southern Mexico and then studying oceanography and later a MSc in marine geochemistry. During his masters, Habacuc worked alternatively as a guide taking tourist to snorkel with whale sharks in La Paz, Mexico.



In 2015, he moved to Hobart to start a PhD at the Institute for Marine and Antarctic Studies with Drs Zanna Chase, Taryn Noble, Ashley Townsend and Andrew Bowie. As part of his PhD, he became involved in the analytical side of oceanography, developing a technique to measure radioactive elements in seawater at extremely low concentrations.

Recently he submitted his thesis and is now working as a research assistant for Dr Taryn Noble at IMAS. When not in the lab or in front of a computer, you might very likely find him scuba-diving or spearfishing somewhere on the Tasmanian coast.

**Abstract:** Discovered towards the end of the 19th century, radioactivity has had a significant impact on society. Many of us think of radioactivity as something negative. However, it represents an incredibly useful tool in studying how our planet works!

Habacuc will introduce you to the basic concepts of radioactivity and how they are applied to study the ocean, then how he applied it to study the Southern Ocean.

The Southern Ocean is the largest high nutrient, low chlorophyll region in the global ocean. In these regions, phytoplankton growth is minimal despite the abundance of nutrients. The cause of this is due to the Southern Ocean being iron deficient.

When iron reaches "anaemic" regions, big "blooms" of phytoplankton appear extending for thousands of square kilometres. These blooms have the potential of absorbing atmospheric CO<sub>2</sub> and, if the conditions are right, to transport it into the deep ocean, thus having a potential impact on climate regulation. The Kerguelen Plateau region hosts the largest bloom in the Southern Ocean and also Australia's only active volcano.



# Black holes and galaxy evolution in under 20 minutes

Patrick Yates majored in physics and applied maths, before continuing his studies with an honours degree supervised by Drs Stanislav Shabala and Habil Martin Krause. His honours topic was studying how black holes in the centre of massive galaxies modulate their impact on their host environment. Patrick was unable to escape the pull of black holes, and returned to UTAS to

study a PhD, again supervised by Drs Shabala and Krause.

Patrick's main area of research is modelling the effect that black holes have on their host galaxy as a function of different environments.

Abstract: At the centre of nearly every massive galaxy cluster lies a supermassive black hole, so dense that not even light can escape its gravitational pull. Surrounding this supermassive black hole is an accretion disk, formed as matter spirals inwards onto the black hole. The supermassive black hole, accretion disk and region immediately surrounding the two are called the Active Galactic Nucleus of a galaxy and are thought to play a key role in how galaxies evolved into what we can observe today.

Patrick will focus his talk on radio jets, which are super-heated and relativistic jets of plasma launched from the accretion disk that punch through the environment

and can produce structures 10 times larger than the diameter of our own galaxy, the Milky Way.

In particular he will look at how these radio jets are formed, how they grow to such large sizes, and how their violent passage through the environment is responsible for maintaining the delicate balancing act that prevents the catastrophic collapse of galaxy clusters.

In his research, Patrick has developed state-of-the-art numerical simulations of these jets launched into realistic galaxy cluster environments, offering the perfect laboratory setting in which to quantify and model their effects on the host environment, and apply these findings to observations. One of the key findings from his research is the need to understand and accurately model the galaxy cluster environment in order to interpret the increasing number of radio jet observations.

# **Aboriginal Reconciliation and Apology**

As the oldest Royal Society outside Britain, The Royal Society of Tasmania (RST) has created a significant international legacy of leadership across a wide range of research fields. Like most learned institutions active in human anatomy, anthropology, linguistics and archaeology during the nineteenth and early twentieth centuries, we inherit a responsibility to better understand and address the impacts this research had and continues to have on Indigenous people.

In early 2018, the RST Council commenced a structured process of examining the Society's records, commissioning independent research and building stronger engagement with Tasmanian Aboriginal people to progress this responsibility. An essential part of this process has been to inform and to take advice from the Society's membership.

The RST Council distributed a discussion paper to Members in April 2019 and responses received have now informed a second document, *The Royal Society of Tasmania: understanding our history and relationship with Aboriginal People.* This document provides a summary of responses, together with a series of recommendations for further action.

These recommendations were considered by Council at its September 2019

meeting, resulting in a series of motions to:

- distribute the second document to members
- develop and formally issue an apology concerning those actions for which the Society can take responsibility
- investigate the development of a Reconciliation Action Plan (RAP).

The report has now been distributed to members by email and the RST Council welcomes further input from members at any time. The RST Council's Aboriginal Engagement Committee will be responsible for the development of an apology in collaboration with Tasmanian Aboriginal people and in cooperation with the Tasmanian Museum and Art Gallery, which is undertaking a similar process. The Committee will also progress investigations into a RAP.

For further information on these processes, please contact the co-chairs of the Committee through the RST email address: <a href="mailto:royal.society@tmag.tas.gov.au">royal.society@tmag.tas.gov.au</a>

Dr Greg Lehman Co-Chair, Aboriginal Engagement Committee

## **Seeking a New Treasurer**

Are you interested in using your financial skills for the benefit of the Society? Not entirely sure what the position entails? Please contact the President, Prof



Ross Large AO or Vice-President, Mary Koolhof or Secretary, David Wilson or the outgoing Treasurer, Peter Meyer to discuss and to receive a copy of the position description.

The office bearers can be contacted in person or via a message to the Society's email address: <a href="mailto:royal.society@tmag.tas.gov.au">royal.society@tmag.tas.gov.au</a> This is a vital role for the Society and we are very keen to hear from interested people.

The Honorary Treasurer is *ex officio* a member of the Council of The Royal Society of Tasmania. Nomination forms have been emailed to all members and are also available from the RST office and from any of the office bearers. Nominations for this casual vacancy need to be received by the Honorary Secretary:

Email: <a href="mailto:royal.society@tmag.tas.gov.au">royal.society@tmag.tas.gov.au</a> attention Hon. Secretary

Mail: GPO Box 1166, Hobart TAS 7001

# 2020 Dates for your Diary

The Society's Council has decided to trial a **Sunday afternoon lecture time** for the Hobart meetings in 2020. Council has received feedback that this may be more convenient for many members.

This will start with the AGM on Sunday 1 March 2020 at 3 pm and continue on the first Sunday afternoon of each month until November. The Christmas lecture and dinner will still be held on the first Tuesday evening in December.

Towards the end of 2020, this decision will be reviewed and feedback from members will be sought.

In the meantime, please ensure that you put **Sunday 1 March 2020 at 3pm** in your 2020 diary today for the first Society meeting and AGM. We look forward to seeing you there.



# Sprinkle Some Sparkle with these Christmas Specials

The Publications Committee has reduced the price of the following books as a special for the Christmas

period. Get in quickly to take advantage of this great offer.

- The Library at the End of the World now priced at \$55 hardcover and \$35 softcover.
- *Poles Apart: Fascination, Fame and Folly* (- see more details of this in this Newsletter in the blue box far below) now reduced to \$60 hardcover and \$40 softcover.

Order online for quick purchasing and to view the wide range of other gift 'treasures' from the Society: Visit all Society products

# The Royal Society of Tasmania Annual Doctoral (PhD) Awards Call for Nominations – 2019

#### **Background:**

The Royal Society of Tasmania established this award in 1998 to honour young, recently-graduated doctoral (PhD) awardees who have made significant advances in the course of their doctoral research. Each award is valued at \$1000. Two awards may be made in any one year.



#### **Conditions:**

- The nomination shall be made no more than three years after the conferring of the PhD degree.
- To be awarded in any field sciences, medicine, arts or humanities within the purview of the Society.
- The Awards are for work leading to significant advances based on the PhD research, as evidenced by published or *in press* peer-reviewed papers in the national/international literature.
- The works are to have been largely carried out in Tasmania or under the aegis of a Tasmanian-based organisation.
- The nationality of the recipients is not be considered in making the Award, that is, the Award is not restricted to Australian nationals.
- The recipients shall be less than 35 years of age on the day of conferment of the PhD.

## **Submitting nominations**

Please email nominations to <u>royal.society@tmag.tas.gov.au</u> and marked *Doctoral Award Nomination. For attention: Honorary Secretary.* 

#### What to include:

 A full academic curriculum vitae including the date of birth, the date of conferring of degrees (including the date of PhD conferment) and a full list of published works. The most significant works are to be highlighted with an

- asterisk. Where the candidate's standing relies on many co-authored papers, the candidate's roles in those significant publications should be indicated.
- An abstract (not more than one A4 page) of the PhD study, including the thesis title.
- A letter of nomination from the candidate's Department Manager and/or PhD supervisor. Applications will not be considered without this document, which must include a statement of the new and original contribution to the field of research.

#### **Key dates:**

- Nominations must be received by **5pm 15 November 2019**.
- The Awards will be announced at the Society's Annual General Meeting in Hobart in March 2020.

Prof. Ross Large AO, President



# Get Ready for a Christmas Treat!

The President and Council of The Royal Society of Tasmania invite you to join them at the December presentation by historian **Dr Alison Alexander** who will enlighten us on her research into the *Exploits of the early governors and their many ladies*.

This engaging event will be held on Tuesday 3 December at 6.00pm at the CSIRO Lecture Theatre, Castray Esplanade, Battery Point. The address will be followed by a two-course buffet dinner at \$44 per person.

Click on this link to access the Invitation and Acceptance Form and provide your details and preferred method of payment.



The Royal Society of Tasmania is offering bursaries for Tasmanian secondary/senior secondary students who have been selected through a competitive process to represent Australia at an international event. The amount of each bursary may be up to \$1000.

What is the Royal Society of Tasmania? The Society has been in active existence since 1843 and we have continued to achieve our aim of 'advancing knowledge' in a wide variety of ways. The bursaries are one way in which we support the youth of Tasmania. More information about the Society's activities is available on our website: <a href="https://rst.org.au">https://rst.org.au</a>

**Who can apply?** In 2018, bursaries were offered in the fields of science, mathematics and engineering. In 2019, the bursary program is being broadened to also support students selected through a competitive process for international events in the arts, humanities and social sciences.

What is the closing date? There is no closing date for applications, as applications are considered on a rolling basis throughout the year.

**How to apply**: Students need to send a written application including:

- a brief descriptor of the international summer school or event they have been selected to attend, including dates and costs
- a copy of the recommendation from the Australian selection event or activity that they were selected to attend
- a concise statement, written by the student, about their goals and aspirations and a short CV (max. two pages)
- the endorsement of a senior staff member of their school.

Note: As the student/staff member may be contacted for interview/further information, please provide contact phone numbers.

**Youth ANZAAS 2019:** Students accepted for Youth ANZAAS 2019 are also eligible to apply for financial support.

Send applications to: <a href="mailto:deborah.beswick@education.tas.gov.au">deborah.beswick@education.tas.gov.au</a>

## **Know Your Members**

On 13 September 2019, **Dr Colin (George) Merridew** was invested as a Member of the Order of Australia (AM) for significant service to surgical and obstetric anaesthesia.

George Is a Life Member of the Tasmanian Branch of the Royal Flying Doctor Service after being President 2009-

2012 and Vice President 2000-2009 and Board Member 1995-2017. At the Australian and NZ College of Anaesthetists, George was Chair Disaster Response Task Force 2005-2012 and the Tasmanian Representative of the Acute Pain Group 1993-2000.

At Launceston General Hospital, George was Director of Anaesthesia 2003-2008, VMO Anaesthetist 2008-2012, Intensive Care Specialist 1994-2013, Staff Specialist Anaesthetist 1986-2001 and Pain Specialist 1986-2008. With the Royal Australian Air Force, George was Group Captain 2001-2013, Consultant Anaesthetist 1989-2013, Chair ADF Anaesthesia Consultative Group 2000-2004, Permanent Air Force 1970-1979 and General Reserve 1979-1984.

Along with various other roles, George has been a Senior Lecturer, School of Medecine, UTAS since 1996 and a Practitioner Member of the Tasmanian Board of the Medical Board of Australia since 2014.



Our **Newsletter Editor**, **Bernard Pryor** was invested with an Order of Australia Medal (OAM) for his services to horticulture, and to the community.

Bernard is an international judge of the American Iris Society, a Life Member of the Iris Society of Australia, has hybridised over 40 unique Louisiana irises and frequently judges at flower shows in

Tasmania. During his teaching career in NSW 1973-2013, he was awarded the Minister's Award for Excellence in Teaching.

Bernard has been awarded a Paul Harris Fellowship (Rotary); the Mary Swords Debaillon Medal for the best Louisiana iris in the world in 2016; the John Betts Medal for the best iris cultivar in Australia in 2010 and the Banksian Medal in 1993 and 1996. Bernard is also a published author; and still contributes to the community in a range of roles in horticultural circles, Rotary, Probus and of course our Society.

# **Treasures from the RST Library**

On Friday 20 September, some members had the opportunity to view a fascinating selection of items from The Royal Society of Tasmania Library housed in the Morris Miller Library, University of Tasmania Sandy Bay campus.

Members viewed with awe the oldest book in Tasmania, *Praeceptorium divinae legis*, (Commentary on the Ten Commandments) printed by Ulrich Zell in 1472 – less than twenty years after the printing of the Gutenberg Bible. This intriguing item was presented to our Society by Mr Warren of Argyle St in



1853. At right, Wendy Rimon (left) shows the *Praeceptorium divinae legis* to Maureen Ling, Austen Hawkins (back), Alison Parsons and Jonothan Davis.

The selection of other items included Captain O'Hara Booth's instructions for the Signal Station; vinyl pressings of the recordings of Fanny Cochrane Smith; a beautiful selection of hand-painted botanical and zoological images from various rare books; and maps including the D'Entrecasteaux Channel.

Many thanks to Juliet Beale, Wendy Rimon and Heather Excell for preparing and hosting the exhibition, and to Dr Anita Hansen and Marley Large for sharing their extensive knowledge of the collection with members.

**Below (top)**: From left, Juliet Beale, Prof Ross Large, Dr Anita Hansen and Marley Large inspect a 19th century volume of pressed seaweed.

Below left: Heather Excell inspects a volume of botanical illustrations.

Below right: Maureen Ling views some rare maps.









#### 2020 Calendar - OUT NOW!

Penguins and sea birds of Antarctica: the illustrations of Edward Adrian Wilson (1872–1912), artist on the Robert Falcon Scott expeditions to the south.

The Royal Society of Tasmania 2020 Calendar is now available for purchase. A beautiful gift for any occasion. The calendar can be purchased at our online shop, by postal order or directly from the Royal Society Rooms.

If you purchase directly from the Royal Society rooms, the price is \$18.00 – open Wednesday mornings at 19 Davey St (opp. Constitution Dock).

Retail price: \$19.95 – click here to go to our online shop.

Or order by post for \$24.00 per copy (including handling and postage within Australia).

Download the Order Form here: 2020 Calendar Order Form

# Promoting The Royal Society of Tasmania Wherever Possible

Several dedicated members of the Society took the opportunity to gain more exposure for the Society, its outstanding publications, its medals and awards system, and its drive for the advancement of knowledge by manning a display stall for the two



days of the inaugural Garden Clubs of Australia Plant Fair. Pictured are (standing) Vice President Mary Koolhof accompanied by Council member Austen Hawkins. One can also see the display table burgeoning with high quality publications produced by the Society.

The Fair was held on 5-6 October at 'Woodbank', 2040 Huon Road, Longley - a four-hectare, private garden developed by plant-hunter Ken Gillanders over many decades from about the 1950s. It is regarded as a Gondwana garden and is a significant garden within the Tasmanian community who relish visiting it on its rare open days in spring. The current owners of the property are Kerry and Harry van den Berg.

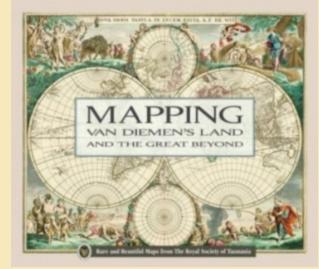
The Fair had over 900 visitors during the weekend and so many were thrilled to learn more about the Society and how friendly and natural its members truly are.

# **Recent Royal Society of Tasmania Publications**

Why not consider these as gifts for Christmas?

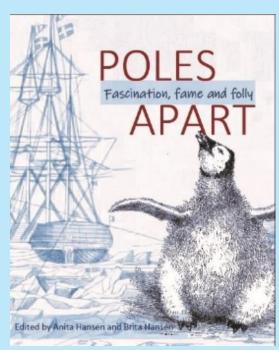
The first book published in 2018 by The Royal Society of Tasmania to celebrate its 175<sup>th</sup> Anniversary year was *Mapping Van Diemen's Land and the Great Beyond*, edited by Lynn Davies, Margaret Davies and Warren Boyles.

This highly informative volume contains over 100 high resolution images of rare and beautiful maps from the Society's Rare Book



Collection with interpretive text from a range of authoritative contributors. This beautiful book is a 'must' for everyone's personal library. Available in hardcover for \$65 or soft cover \$45.

Purchase your copy of 'Mapping Van Diemen's Land and the Great Beyond' now.



The second book published as part of the Society's 175th Anniversary celebrations is *Poles Apart: Fascination, Fame and Folly* edited by Dr Anita Hansen and Dr Brita Hansen and is based on the Society's Rare Books Collection.

The last two frontiers on Earth, the Antarctic and the Arctic, are the stuff of heroes, heartache, courage, mystery, misery, endurance and loss. All these and more are captured in the pages of *Poles Apart: Fascination, Fame and Folly*. This wonderful book lays out, in a series of snapshots,

mankind's incredible persistent battle in both taming and understanding our amazing icy wilderness.

Both hard and soft cover versions are available and can be obtained from the <u>Society's website</u> and from bookshops. The 1000 hardcover copies are numbered and signed by the editors.

Christmas Special: For this Christmas, the hardcover version is reduced to \$60.00 and the soft cover version is down to \$40.00. Ensure that a copy of this exciting book finds its way to your bookshelf or give copies as superb gifts!

#### **REVISED POLES APART INDEX**

A number of errors have unfortunately been found in the index to our recent book *Poles Apart: Fascination, fame and folly* so to rectify this, Anita Hansen and John Volkman have produced a new index. A printed version is available free of charge to purchasers of the book and can be collected from the RST office on Wednesday mornings or at our lecture on the first Tuesday of the month. Alternatively, a printed copy or pdf can be provided by email by contacting the Honorary Editor at <a href="mailto:johnkvolkman@gmail.com">johnkvolkman@gmail.com</a>

Purchase 'Poles Apart: Fascination, Fame and Folly' now.

#### Louisa Anne Meredith exhibition in Swansea

The Louisa Anne Meredith exhibition featuring reproductions of paintings from The Royal Society of Tasmania's art collection (- see right) was opened at the East Coast Heritage Museum on Thursday 3 October. The exhibition, curated by Drs Anita Hansen and Brita Hansen, is part of the Society's 175<sup>th</sup> Anniversary commemorations.



The Glamorgan Historical Society has also included some of their Louisa Anne Meredith collection, including her exquisite wedding veil (- see below left) and other unique material.





The Glamorgan Historical Society's Treasurer, Noel Stanley (seen above at right), introduced our Society's President, Prof Ross Large AO (centre), who spoke about Louisa Anne Meredith's role in the Society and her remarkable paintings. Ross also conveyed the Society's pleasure in being able to have the exhibition showing in Swansea – Louisa Anne Meredith's home for part of her life in Tasmania. He then introduced Dr Brita Hansen who commented about the artworks.

The exhibition will be in Swansea until March 2020, so if you are visiting the east coast during the summer, drop by the East Coast Museum and view this exciting exhibition.

# Save the Date

#### **Hobart December Event**

All welcome: Members and friends are invited to attend an address on **Tuesday 3 December** at 6 pm at the CSIRO Theatre, Castray Esplanade, Battery Point by **Dr Alison Alexander** on **The exploits of the early governors and their many ladies**.

This event will be followed by a two-course buffet dinner at \$44 per person. Please see more details in a box above.

#### The Northern Branch

This Branch will meet again on **Sunday 24 November** at 1.30pm for a presentation by **Prof James Vickers**, **University of** 

Tasmania on 'Reducing risk of dementia: evidence and opportunities' – Can Tasmanian data show how 30 to 50% of dementia cases can be prevented by public intervention on particular risk factors?

Open to the general public. Admission is free for members of the Royal Society of Tasmania; \$6 for general admission; \$4 for students, QVMAG Friends and the Launceston Historical Society.

Meeting Room, Inveresk QVMAG

# A Botanical Artist's Journey presented by Lauren Black

**Sunday 3 November 10.15 to 11.30** at the Royal Tasmanian Botancial Gardens Visitor Centre, Lower Domain Road, Hobart.

Join artist Lauren Black in this special, illustrated talk to discover her journey of painting The Albany Pitcher Plant, Cephalotus follicularis. In this talk, Lauren will take you through her personal experience with painting this unique "insect-eating plant" – a journey encompassing Malaysia, Australia, then on a Churchill Fellowship to London and Florence.



For more information or to book tickets, visit: <u>laurenblackartisttalk.eventbrite.com.au</u> or call 03 6166 0976 or email: <u>visitorservices@rtbg.tas.gov.au</u>



The Tasmanian Museum and Art Gallery (TMAG) is open Tuesdays to Sundays between 10:00 am and 4:00 pm from 1 April until 24 December.

TMAG is also open from 10:00 am – 4:00 pm on Monday public holidays year-round.

The museum is closed Good Friday, Anzac Day (25 April) and Christmas Day. TMAG What's On - calendar of events.

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- FORWARD to a FRIEND RoyalSocTas newsletter

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