***2020 ASPS President’s Report***

ASPS promotes the discipline of Plant Science and provides professional contact and networking for plant scientists and University-level educators in Australia. <http://www.asps.org.au/>

Key objectives of the Society are to:

• Facilitate the dissemination of new research.

• Provide a forum for sharing of knowledge so that the membership can build both the depth and breadth of knowledge of plant functions.

• Provide mutual support and collective mentorship.

• Recognise and reward excellence in plant science research and teaching.

• Nurture the next generation of plant scientists.

As I leave as President after two years my main message to the Society members is, ***participate and communicate***! Locally, is becoming so important now, and globally, more difficult but technology has enabled this to work. If you don’t read any further, but have taken on this message on, that’s great.

It has been 10 months since the Society last met at our first ASPS-only meeting held at LaTrobe University Bundoora Campus and what a huge success it was. Since then the CoVid-19 pandemic has seen huge changes in our work and private lives. Above, I have included the Society objectives to remind us all of the role of this Society and to emphasise how important it is for us to consider how we can meet these during these changing and isolating times. It has sparked the development of some great communication ideas from that sub-committee which will become evident later in this report and the other committee reports.

This year has seen a great effort by the fantastic executive and council team, to continue to promote the Society and its objectives during isolation. So I can re-assure you that the Society had continued to deliver on its key objectives and more. So I begin this report by thanking the ‘team”. We have had a new team begin with the departure early this year of the Secretary, Vanessa Melino. She left her position early to take a position at KAUST in Saudi Arabia, working with Mark Tester. For her year as Secretary she did a great job and spent a lot of time organising future deadlines and files. We wish her all the best in her new position. So we had a new Secretary begin early this year, Simon Williams and a new Hon Treasurer, Mike Haydon, and they have taken up these roles and doing great work. They have been fantastic support to me this year. Also many thanks to Janet Wheeler, who keeps the website and database going and sending out the emails that keep you informed of what’ happening. These scientists have been incredible source of support and energy. Thanks also go to Rachel Burton, our representative on Science Technology Australia <http://scienceandtechnologyaustralia.org.au/> ; Barry Pogson, our representative on the Global Plant Council and Ros Gleadow who is President of that Council <http://globalplantcouncil.org/>.

Thanks should also go to the whole Website and Communications Sub-Committee who have been busy promoting ASPS through social media and have helped to keep the website active and of course all the Discipline/State Representatives, student representatives and Beth Loveys our Teaching rep, all of whom have actively participated in many of our activities this year.

This has been my second year as President and we will now welcome a new President, Dr Peter Ryan. The pandemic hasn’t allowed me to do as much as I had wanted during my time, but I know Peter will do a great job and I am keen to support him as much as I can in the future.

**ASPS meeting 2020**

Due to the pandemic restrictions coming into place in March 2020, and the uncertainty of how long these restrictions would last, the decision was taken to cancel Combio2020, but hold it in 2022. The details for this meeting can be found on our website. Thanks goes to Ros Gleadow (Monash University) who is the ASPS representative on the organising committee.

However, we are still connecting and celebrating our Award winners with special Plantae webinar session to be held on 30th Sept. This will make ti very special as it is circulated world-wide and our great OZ science will be promoted at an International level. The link for this session will be circulated before that date.

To avoid too long a meeting via the internet, we will hold our AGM the next day 1st Oct. I hope you will find the time to attend and keep in contact with the Society during our time in isolation.

It’s unfortunate that we couldn’t hold a more extensive virtual meeting and I know I will miss catching up on the science and the people this year.

**Future meetings**

The global pandemic is not only affecting meetings in 2020, but caution is also being taken in 2021. Here are the current plans for our future meetings;

* In 2021 we had voted at the 2019 AGM to hold our ASPS meeting that year as part of IPMB2021, however this meeting has now been moved to 23-27th Oct 2022. Therefore, we need to plan for an ASPS meeting and Caitlyn Byrt has been working on a plan, which may still take account of CoVid-19 restrictions as we can’t predicted how life will be in 2021. Our AGM/meeting will still be held around Sept/Oct time.
* Combio 2022 will be held in Melbourne now as the preplacement for ComBIO2020, at the Melbourne Convention Centre 27-20th Sept 2022. The IPMB2022 meeting will now be held in Cairns 23-27th Oct, a month later. We appreciate that members may need to make a choice here, but I am discussing the possibility of travel bursaries for students for both meetings.
* For 2023, we will hold an ASPS meeting in Tasmania, Eloise Foo has volunteered to run this.
* For 2024, we have been contacted to be part of the IUBMB 2024, (international Union of Biochemistry and Mol. Biol) as Combio substitute meeting but we will discuss this further at our AGM

**Other conferences**.

ASPS has supported a bid for the **Workshop on engineering ion channel aquaporins and boosting food security**, which was held 12-13th May 2020 at ANU, organized by Caitlin Byrt. Of course this meeting has been postponed and we will announce any developments of the website and by email to members. <https://biology.anu.edu.au/news-events/workshop-engineering-ion-channel-aquaporins-and-boosting-food-security>

As expected, there have been no other requests for meeting support but I would like to encourage our Discipline reps to ask for help with promoting local meetings, even if they are virtual.

**Congratulation to ASPS Awards winners in 2020!**

* **Dr. Alex Wu** on winning the **Peter Goldacre Award** for his research. He conducts theoretical research on integrating complex mechanisms underpinning adaptive traits in major cereal crops. He leads the development of predictive models that operate across scales of biological organization spanning from leaf photosynthetic pathways to crop growth and yield in production environments. His breakthrough work in plant modelling, published in Nature Plants, unlocks the capability for quantifying yield implications of photosynthetic manipulation. Alex is also undertaking photosynthesis and plant physiology experiments to complement model development and testing. The theoretical and experimental synergy is bridging plant biology and crop science disciplines and targets novel avenues for accelerating productivity gains.

The Goldacre award recognises research achievement in the past 3 years by an early-career member of the Society (within 10 years of PhD). The Award honours the memory and attainments of Peter Goldacre, a young scientist and foundation member of this Society who was held in great respect by his peers, but passed away from cancer at the early age of 34 (in 1960). The award of a medal plus $2,000 is sponsored by Functional Plant Biology.

This year there were a number of exceptional applicants for the **Jan Anderson Award** and the reviewers decided to award a joint award due to the highly competitive nature of the applications.

* **Dr. Kristine Crous** won the award for her work on the responses of photosynthesis and respiration to experimental warming and/or elevated CO2 to gain insight into how plants will adjust physiologically in the face of climate change. It emerges that the capacity for acclimation to warmer temperatures differs between plants from tropical and temperate regions. For tropical species, photosynthesis operates closer to the temperature optimum than for temperate species, which may have consequences for future carbon gain. Her extensive research has contributed photosynthesis and respiration data towards global compilations that synthesise plant leaf traits and improve land surface models.
* **Dr Crystal Sweetman,** has an excellent background in plant primary metabolism, applying her skills to a number of plant systems, from grapes to legumes, with a focus on the effect of changing temperatures and other abiotic stresses. She has investigated key features of respiration that are unique to plants and which play important roles in plant growth and performance. In particular, she has identified the gene encoding a mitochondrial dehydrogenase that oxidises NADH from the cytosol and is important for protection against photoinhibition in the chloroplast and demonstrated a key relationship with the alternative oxidase of mitochondria and when expressed at high levels the two enzymes enhance recovery from exposure to environmental stress. These enzymes are promising candidates for selective breeding strategies for plants with improved abiotic stress tolerance.

This Award was introduced in 2018 and is made to an early or mid-career female in recognition of outstanding research conducted subsequent to their PhD. The award is named after Joan (Jan) Mary Anderson FAA FRS FDhc (Umeå), an internationally acclaimed plant biologist renowned for her discoveries on the organization of the intricate membrane structures that carry out solar energy conversion in cells of green plants. Her research career spanned some 55 years, mostly at the Division of Plant Industry CSIRO Canberra (1961-97) and then in the Research School of Biological Sciences at the Australian National University. The award is supported by $2000 cash price and is sponsored by CSIRO Agriculture and Food, the ARC Centre of Excellence in Plant Energy Biology and the ARC Centre of Excellence for Translational Photosynthesis.

* Hank Greenway, Dr. David Turner, Jane Gibbs, (UWA) and , Brian Atwell (Macquarie Univ.) are joint recipients of the **ASPS Teaching Award** in 2020. The award recognises excellence, innovation and/or contributions to teaching of plant science at University level. The work that warrants this award is about teaching our new generation of plant scientist about critical thinking, an incredibly important issue. Their work can found as a submission in Phytogen published in 2020 and will be presented at our AGM.
* Karen Michiko Frick has won the **the ASPS-FPB Best Paper Award** in 2020 for her paper “The role of jasmonate signalling in quinolizidine alkaloid biosynthesis, wounding and aphid predation response in narrow-leafed lupin” published in volume 46 in 2019. This annual award is given for the best paper published by an early-career researcher in the Functional Plant Biology in each calendar year.
* Yingxuan Ma from LaTrobe Univ. has been awarded the **RN Robertson Travelling Fellowship** in 2020.The application was to visit a lab in Japan, and is has been defereed pending a change in pandemic restrictions .Reports from previous winners are available at: http://www.asps.org.au/awards/robertson-fellowship

**Website & Communications.**

This sub-Committee (WSCS) have the goal to disseminate information related to ASPS and plant biology among the society members and general public and promote ASPS. They do this through **Phytogen** <http://www.asps.org.au/publications/phtyogen/phytogen-blog> and social media activities. This team are doing a fantastic job and I believe through these media, they have increased the visibility of ASPS. They have collected data that reflects this outcome and you can see that in their current report. I thank them for a great year and please keep doing such a good job.

**Plants in Action**

Thanks go to Rana Munns and Ulrike Mathesius, who have continued on as PiA co-editors. Good news is that the updating of this valuable resource is continuing and that there is a suggestion that each chapter has a separate DOI. This would cost the Society $US275 a year, which is well worth the investment in my view and I hope the Society supports this.

Further, there are now issues being printed in Hindi, to make it more assessable as a teaching resource in India. More details are available in their report.

**Functional Plant Biology**

ASPS has a special relationship with FPB. We thank FPB/CSIRO Publishing for continuing to sponsor the Goldacre Award and ASPS-FPB Early Career Scientist Best Paper Award.

There has been a Delcie in Australian-based submissions for publication in FPB which is not good news. I encourage members to submit their work to this journal and support it. I would also like to encourage members to think about Speical issues that they may wish to compile for FBP. Please contact Sergey Shabala for information. We thank ASPS members who have submitted contributions to the peer review process for FPB in 2020.

**Science Meets Parliament.**

Unfortunately this year this event was not held due to the global pandemic and restrictions in place. However, during our ASPS 2019 meeting and before our lockdowns, Dr Tracey Cuin and Prof Rachel Burton attended the 2019 session and their report can be found in an early 2020 Phytogen.

**Science and Technology Australia**.

We are active participants in this group and our Representative on the board is Rachel Burton.

I would like to encourage you to read Rachel’s report for 2020. She describes the role of the Association and the value to our Society. Of note is the appointment of Ambassadors of STEM where STEM professionals are matched with the Federal MP in the electorate in which they either live or work <https://scienceandtechnologyaustralia.org.au/?s=ambassadors+of+stem> ASPS has two representative in this second cohort

* + Dr Tracey Ann Cuin was matched with Brian Mitchell in the electorate of Lyons <https://scienceandtechnologyaustralia.org.au/profile/tracey-ann-cuin/>
  + Professor Rachel Burton was matched with Rebekha Sharkie in the electorate of Mayo <https://scienceandtechnologyaustralia.org.au/profile/prof-rachel-burton/>

As an outcome from STA activities, Eloise Foo, Vanessa Melino and Megan Sheldon have put together a **Diversity and Inclusion Policy** for our Society to follow which has been included for discussion at the AGM. I would encourage the Society to accept this policy and its posting on our website.

Additionally, in these troubled economic times for Universities and Science, STA represents an excellent conduit between scientist and Government which we can and should use.

**Prestigious Recognitions**

Congratulations go to two notable plant scientists were elected to the Australian Academy of Science in 2019. They were Prof Harvey Millar (UWA) and Prof Ryan Lister (UWA)

Kathleen Soole

President, Australian Society of Plant Scientists, September 2020