



# National Science Week Victoria 2018 Report

2018 represented the first year the Royal Society of Victoria took management of Science Week in Victoria. Despite new management, structures and procedures, 2018 was a successful Science Week in Victoria with increased events and media (compared with 2016 and 2017), strong audience interest, and engagement from new event holders. These results provide a strong platform on which to continue to build Science Week in Victoria over the coming years. These strong results are due in part to the generosity of CSIRO Education, previous managers of Science Week, and the Victorian Science Week Coordinating Committee in providing advice to the new Victorian Science Week Lead at the RSV, and for being excellent custodians and advocates of Science Week.

Aside from the expertise of the Coordinating Committee and CSIRO Education, major contributors to the success of Science Week 2018 included the following

# Highlights:

- 1. Strong networks in the library sector and the Science Week information pack for libraries contributed to increased events and helped to strengthen engagement in the regions (figures 4 and 8)
- 2. Appointment of a dedicated Victorian publicists, Zilla & Brook allowed media to be actively pursued and followed up without relying solely on the National publicists. This resulted in increased media for 2018 (figures 9 and 10, and see also the Zilla & Brook media report). Zilla & Brook also transported talent to radio stations for interviews, and shared their networks to attract event talent.
- 3. Appointment of the Victorian Science Week Lead allowed dedicated attention to be focused on Science Week, new grants to be administered, new networks to be built, event holders and grant holders to be supported, events to be organised, international guests to be managed, media and social media to be coordinated, the IV website to be built in time, and budgets to be balanced.
- 4. Vigorous social media advertising allowed good visibility of Science Week and its associated events (see Social Media section of this report for further details).
- 5. Small grant scheme built capacity for some organisations to hold events or to make events bigger and better (see Vic Seed grant section of this report).
- 6. Humans 2.0 main event this event presented excellent media opportunities and was highly relevant and interesting to Melbourne adult audiences (see Humans 2.0 report).

### Challenges in 2018 and lessons for 2019:

1. Short lead time for the organisation of Science Week 2018 – the change to management and the mid-March appointment of the Victorian Science Week Lead

meant that the lead time for the 2018 festival was short (less than 5 months). This made certain long-lead projects impossible to achieve – for example: seeking significant sponsorship for events, building large events and collaborations, engaging a Victorian publicist early.

- 1. Lessons begin planning and organising Science Week 2019 and approaching potential sponsors as early as possible (from September 2018). Engage the Victorian publicist one month earlier (budget pending).
- 2. Building new infrastructure and schemes while organising Science Week 2018 constructing the new Inspiring Victoria website, and the Vic Seed Grant scheme with significant time pressures meant that compromises needed to be made with both.
- Lesson Additional capabilities, such as online forms, will be built into the Inspiring Victoria website in October 2018 to be ready for Science Week 2019. The Vic Seed Grants will be announced earlier in 2019 to allow more time to publicly communicate the grant scheme and provide more time for grant recipients to plan their events.
- 3. International guest schedules were announced too late in 2018 the National organiser for the Science Week international guests was very slow in finalising guest schedules in 2018. This meant additional work in managing international guest schedules and event holders, and lost media opportunities.
- 3. Lesson Consider setting aside Committee funds to organise an international guest directly, in addition to any international guests being organised for National tours. That way, the international guest can be secured early and can be scheduled for the Victorian launch event and for media opportunities.

### Intended areas of focus for 2019:

- 1. Hold a public launch of National Science Week in Victoria budget constraints and short lead in times prevented this from occurring in 2018, but the additional lead in time allows for the possibility of a public launch event in 2019. This would increase engagement and also media opportunities.
- 2. Sponsorship the budget for Science Week in Victoria is small in comparison to other major Melbourne festivals, to increase reach and quality of events, sponsorship will need to be a major focus in 2019.
- 3. Grants offer a dedicated small grant scheme specifically for libraries, in addition to the community seed grants. Offering support to libraries can increase activities in regional areas.
- 4. Communications –increased lead in time for 2019 will allow greater communication volume (via e-news, web, social media, etc), distribution, and communication coordination with aligned organisations, and volunteers (through the RSV and Universities) to be enlisted for assistance.

5. Support for regional areas – build capacity and networks through the Inspiring Victoria program, award Vic Seed Grant funding to regional organisations (where appropriate), and continue to aid event holders.

### **Event Data**



2018 Event map for Victoria

A total of **435** events were registered in Victoria for National Science Week 2018 (figure 1, official data from the National office). This represented an increase of **109** events compared with 2017 (total of 326 events) and an increase of 127 events compared with 2016 (total of 308 events). Overall across the state, 56% of events were public with the remainder private.

Nationally, 2100 events were registered in 2018 (of which 21% were Victorian), compared with 2157 events in 2017 (15% were Victorian), and 1810 events in 2016 (17% were Victorian).

Note that this data includes only those events which were officially registered as Science Week events through the National Science Week website. In 2018, as with previous years, some event holders neglected to register their events and as such their events have not been counted

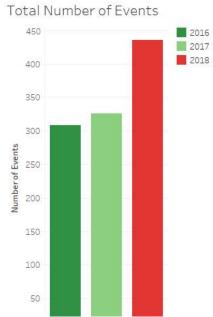


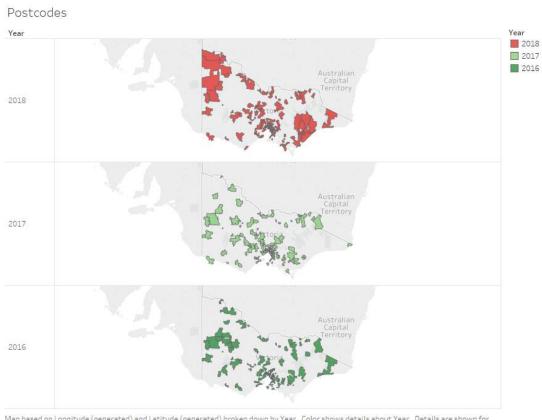
Figure 1: Total number of registered Science Week events held for 2018, 2017 and 2016.

as official Science Week events. Continued effort is required to remind and motivate event holders to register their events.

The increase of total registered events in 2018 is significant and can likely be attributed to a mix of both:

- 1. the coordinated efforts of the National Science Week office, Royal Society of Victoria (RSV), Victorian Science Week Coordinating Committee, and collaborating partners in communicating (through social media, websites, and other channels) the importance of registering Science Week events on the National Science Week website (see Media and Social Media reports). Particular progress was made with the University of Melbourne who uploaded significantly more of their Science Festival events in 2018, and
- 2. an increase in events held in celebration of Science Week across the State (see figures 3, 4)

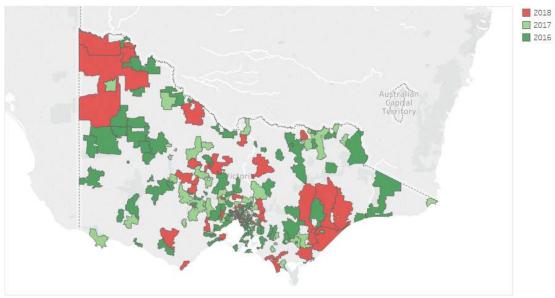
### **Event location trends**



Map based on Longitude (generated) and Latitude (generated) broken down by Year. Color shows details about Year. Details are shown fo Postcode.

Figure 2 - Comparison of Science Week events held by postcode for 2018, 2017 and 2016.





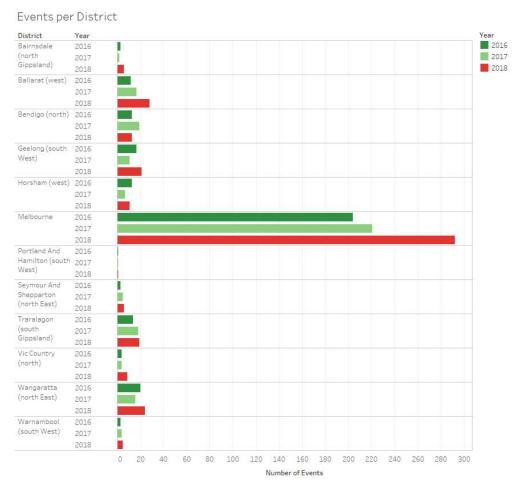
Map based on Longitude (generated) and Latitude (generated). Color shows details about First Appearance (Pcode). Details are shown for Postcode.

Figure 3 – Map showing year in which districts first held Science Week events (data for 2016, 2017, and 2018 only)

As **figures 2, 3 and 4** show, most events were held in and around Melbourne and its suburbs.

In regional Victorian areas, figures 2 and 3 show that some postcode regions have been engaged for the first time in 2018, (for example: Bairnsdale, Camperdown, Chilton, Euroa, Kerang, Inverloch, and Ouyen), and others have been retained from 2017, (for example: Ararat, Leneva, Nhill, Portland, Morwell, and Yackandandah), or regained from 2016, (for example: Koroit, Maffra, Orbost, and Swan Hill) while some postcodes did not present events in 2018 compared with 2017 or 2016 (for example: Corryong, Cobden, Moe, Penshurst, and Robinvale). Figure 2 also shows the variability in regional postcodes engaging with Science Week across three years. In some postcodes with small population density, often a single event only will be presented by a passionate teacher or community volunteer. If that teacher or community member moves away from the region or decides to take a break from organising an event, this often means that the entire postcode drops from the Science Week map.

An important role that Inspiring Victoria can play in assisting Science Week efforts is building capacity and redundancy into regional Victorian areas so that a network of passionate locals can be supported to regularly present Science Week events each year.



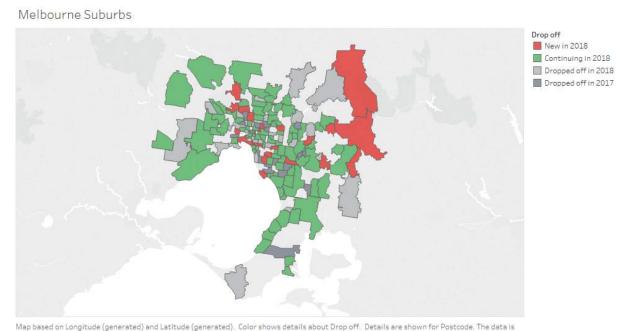
Sum of Number of Records for each Year broken down by District. Color shows details about Year. The view is filtered on District, which excludes Null.

Figure 4 - Comparison of the number of events held by district in 2018, 2017, and 2016

As can be seen from **Figure 4**, large gains in event numbers have occurred in the Melbourne district (which includes Melbourne suburbs) in 2018 (more than an additional 90 events compared with 2017). Gains were also made in the Bairnsdale, Ballarat, Geelong, Seymour, Traralgon, Vic Country, Wangaratta, and Warrnambool regions in 2018 compared with previous years. Ballarat figures are of note given the support of this community through the Inspiring Victoria program. Ballarat was a location visited by the 2018 Science Week International Guests, and several Ballarat organisations were the recipients of grants (one 2018 National Science Week grant, and two Vic Science Week Seed Grants).

In 2018 events were gained in Horsham compared with 2017 levels but were still reduced compared with 2016, indicating support needs to be offered to the Horsham community to increase Science Week events. The Portland, Warrnambool, Seymour, and Bairnsdale communities returned ongoing low participation rates, and would also benefit from Inspiring Victoria and Victorian Science Week Coordinating Committee support.

Events were decreased in Bendigo in 2018 compared with 2017 levels. This was despite Victorian Science Week Coordinating Committee support in sending an international guest to Bendigo, and a 2018 National Science Week grant to the Discovery Centre. The increased activity of the Bendigo Tech School in coming years seems likely to drive increases in local STEM-networks and increased Science Week activity in Bendigo.



filtered on District, which keeps Melbourne. The view is filtered on Drop off, which keeps Continuing in 2018, Dropped off in 2017, Dropped off in 2018 and New in 2018.

Figure 5 – Events held in Melbourne suburbs 2018, including suburb drop-off and pick-up

Figure 5 shows the spread of events across Melbourne suburbs, and the variability in suburbs offering events across 2016, 2017 and 2018. The red indicates that 2018 saw several suburbs new to offering Science Week events, and many suburbs where Science Week events continued to be offered in 2018 in line with 2017/2016 data (indicated in green). Some suburbs however did not offer Science Week events in 2018 despite having done so in 2017 (indicated in light grey). Other suburbs offered events in 2016 but did not offer events in 2017 or 2018 (indicated in dark grey). Still other suburbs are yet to register Science Week events.

The data shows that whilst an impressive number of Melbourne suburbs are offering Science Week events, there is some variability in consistency as to which suburbs are holding events across different years. Supporting library networks in the suburbs with grants and information may assist in increasing further participation of suburbs in Science Week 2019.

# **Event Type trends**

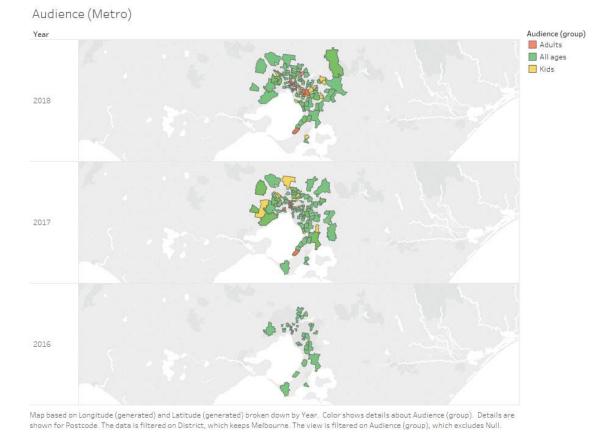


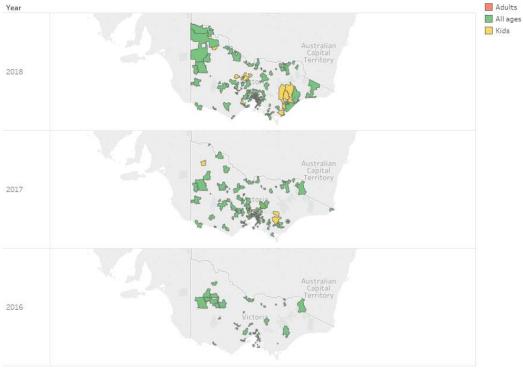
Figure 6 - Map of audience type for 2018, 2017, and 2016 Melbourne events

Figures 6 and 7 show that the majority of events held for Science Week are open to all ages, and this trend appears to be continuing across 2016, 2017 and 2018. This is particularly pleasing given one of the key messages for Science Week 2018 was that 'science is for everyone', and the event offering very much supported this key message. Events specifically targeting kids scatter across both Melbourne and regional areas. Adult only events are more likely to occur in Melbourne and suburbs, although represent a much smaller proportion of the total Science Week events.

In 2019, Victoria will continue to promote the 'science is for everyone' message, and will look to expand the organisations with which it collaborates and partners to increase its reach within the community (see figure 8 and associated text below).

2018 saw significant gains in the number of libraries organising Science Week events (94 in 2018 compared with 13 in 2017, **figure 8**). This most likely reflects increased communication with the public library network through the Inspiring Victoria board and also through the Science Week library information pack which was distributed nationally

### Audience (Regional)



Map based on Longitude (generated) and Latitude (generated) broken down by Year. Color shows details about Audience (group). Details are shown for Postcode. The view is filtered on Audience (group), which excludes Null.

Figure 7 - Map of audience type for 2018, 2017, and 2016 Vic regional events

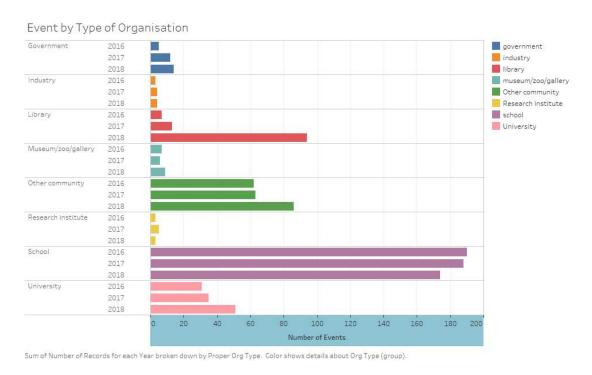


Figure 8 – Organisation type holding events in 2016, 2017, and 2018.

(but with substantial input and support from Victoria). In addition, six out of 20 Vic Seed Grants were awarded to libraries to enable 2018 Science Week event activities.

National data shows that 349 events were held in libraries for Science Week, with 102 of those being in Victoria (the highest number of all of the States). Victoria was followed by S.A with 65 events, and N.S.W with 62 events.

Gains were also made in the University and 'other community' organisation sectors in 2018 (51 University events in 2018 compared with 35 in 2017, and 86 Other Community events in 2018 compared 63 in 2017). Increases in events run by community groups such as Astronomical Societies, and science communication groups contributed to gains in the 'other community' sector in 2018. The gain in University registered events reflects significant effort to liaise with representatives from Victorian Universities. For example, the University of Melbourne registered many more of their Science Festival events on the National Science Week website in 2018 compared with previous years, and the Monash University representative for Science Week was aware of the obligation to register events through his role as invited keynote at the Science Week launch event and as a member of the Monash STEM network.

A decrease of 14 schools registering their events for Science Week in 2018 compared with 2017 most likely reflects the absence of previous vigorous CSIRO Education communication with schools in Victoria (in support of STAV and ASTA communications around Science Week). In 2019, the RSV will work closely with STAV and ASTA to ensure support for Science Week communications, and will support the National Science Week office in their proposed Science Week information pack for before and after school care facilities and kindergartens in 2019.

In 2019, Victoria also propose to produce a Science Week information pack for galleries. Galleries, like libraries, are often significant facilities in regional communities. The Art Gallery of Ballarat and the Geelong Gallery through activities in 2018 have proven that gallery audiences are interested in science, and that galleries are well placed to run meaningful workshops, activities, exhibition trails, and public lectures for Science Week.

Increases in government organisations holding events is expected in 2019 given increased lead in time and further establishment of networks through Inspiring Victoria, while work is underway to increase industry involvement with Science Week through partnerships and collaboration around key Science Week activities such as the international guest program.

### Victorian Coordinating Committee events

Science Week launch

Magnet Galleries, Docklands, Fri 10 August, 5:30PM – 8PM





Science Week 2018 was officially launched by Dr Amanda Caples, Victorian Lead Scientist, at an invitation only event held at Magnet Galleries, Docklands. Surrounded by an exhibition of science photography, the event was attended by over 70 people representing Science Week event holders, and Inspiring Victoria stakeholder organisations (government, universities, schools, media, libraries and community).

A highly entertaining and informative launch keynote was delivered by Dr James Driscoll, geologist from Monash University about volcanos in Victoria and the volcano responsible for Mary Shelley's Frankenstein.

The launch was a good opportunity to celebrate and thank stakeholders for their collaborative efforts in bringing together a record number of events for Science Week in Victoria. For further information, please refer to the launch story: https://inspiringvictoria.org.au/2018/09/05/the-science-week-victoria-launch-was-a-blast/

### Humans 2.0

524 Flinders Event Space, Wed 15 August, 6PM - 10PM





The Humans 2.0 video can be found at: <a href="https://www.youtube.com/watch?v=yL\_ziavtDUg">https://www.youtube.com/watch?v=yL\_ziavtDUg</a> and a story about the Humans 2.0 event can be found on the Inspiring Victoria website at: <a href="https://inspiringvictoria.org.au/2018/09/06/humans-2-0/">https://inspiringvictoria.org.au/2018/09/06/humans-2-0/</a>

Please refer to associated Humans 2.0 report and survey data for more information.

# Media

The following graphs were constructed from data provided from Isentia Media (National office organised media monitoring and reporting service for Science Week).

Data has been graphed and sorted so that the States appear in descending order from the highest recorded result in 2018 on the left to the lowest recorded result in 2018 on the right. Note some circulation data was unavailable for NT and TAS.

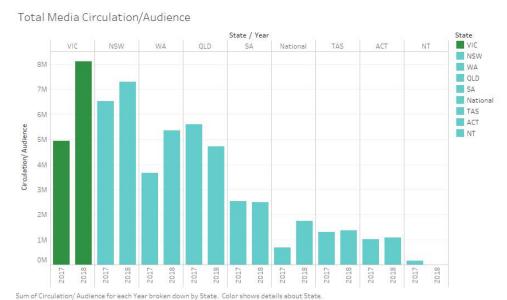


Figure 9 - Total media audience for each State in 2017 and 2018

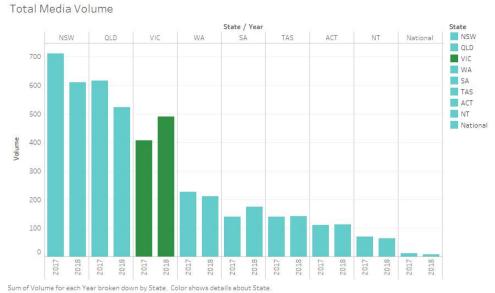


Figure 10 - Total media volume for each State in 2017 and 2018

Nationally, Science Week received 3130 media mentions in 2018 (3036 in 2017), and a 32.4 million cumulative audience (26.5 million in 2017) with \$7.6 million value (\$4.59 million in 2017, with the increase due to greater coverage on TV).

### 2018 National media volume totals:

TV: 968
Radio: 740
Print: 601
Internet: 821

**Figure 9** shows a significant increase in total media audience/ circulation number in Victoria in 2018 as compared with 2017 results. Compared with other States, Victoria recorded the highest increase in audience number for total media in 2018. This year Victoria recorded the highest audience/circulation number (8,101,941) of all of the States.

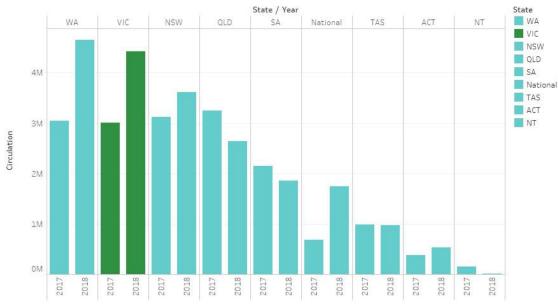
Total media volume in Victoria was also increased in 2018 compared with 2017 levels, although the increase was not as marked as the increase in audience (figure 10). Victoria sits in third behind NSW and QLD for total media volume. However, it is pleasing that unlike NSW and QLD who saw decreased total media volume for 2018 compared with 2017, Victoria recorded an increase. NSW and QLD also run major Science Festivals during Science Week which present and attract significant media opportunities, Victoria lacks such a Science Festival.

**Figures 11 – 16** show the breakdown of audience number or volume for specific media (print, radio, and TV). As can be seen Victoria ranks either first or second in all of these measures, and showed significant gains in 2018 particularly in print circulation, radio audience, and TV volume and coverage.

The area of focus for 2019 is to increase the volume of media by:

- 1. Securing the Victorian publicist earlier in the year (and engaging them an additional month prior. Budget pending).
- 2. Securing good quality international guests and locking down their schedule as early as possible to allow time for media pitching and follow up.
- 3. Working with collaborating organisations to time media announcements in the lead up to or within Science Week. This worked particularly well in 2018 with Museum Victoria timing the announcement of a significant discovery for during Science Week and then the Museum media team working with the Victorian Science Week publicists to capitalise on this announcement.

### Press Circulation

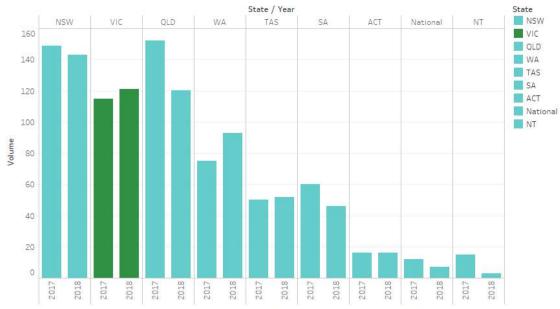


Sum of Circulation/ Audience for each Year broken down by State. Color shows details about State. The data is filtered on Media, which keeps Press.

Figure 11 - Press circulation for each State in 2017 and 2018

- 4. Working more closely with ASTA to ensure that the Victorian publicists receive further information about the Victorian school grant recipients and their planned activities for Science Week. And working with Victorian schools to ensure they embrace media opportunities.
- 5. Further empowering event holders in regional areas to use their local networks to gain media for their events. Media packs and information are sent to many event holders via the National publicist. Several of our Vic grant recipients provided feedback that they would have liked this information earlier. In 2019, the Victorian Science Week Lead will provide this information when grant recipients are first notified of their success.

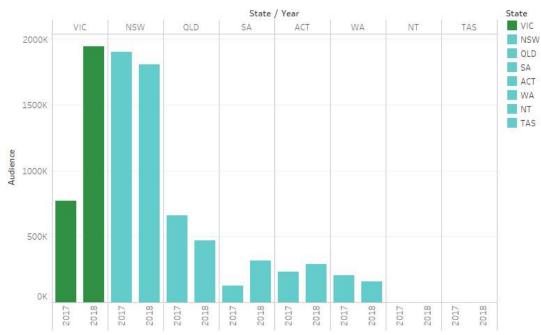
### Press Volume



Sum of Volume for each Year broken down by State. Color shows details about State. The data is filtered on Media, which keeps Press.

Figure 12 - Press volume for each State in 2017 and 2018

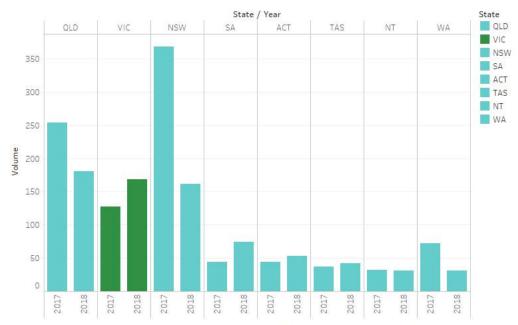
### Radio Audience



Sum of Circulation/ Audience for each Year broken down by State. Color shows details about State. The data is filtered on Media, which keeps Radio.

Figure 13 – Radio audience for each State in 2017 and 2018

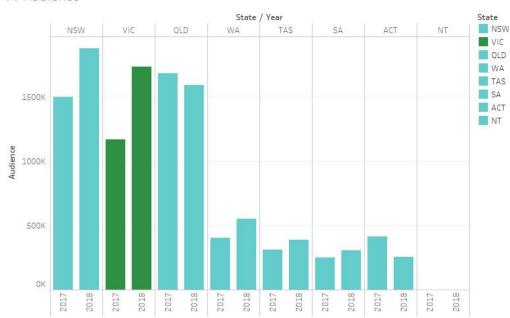
### Radio Volume



Sum of Volume for each Year broken down by State. Color shows details about State. The data is filtered on Media, which keeps Radio.

Figure 14 - Radio volume for each State in 2017 and 2018

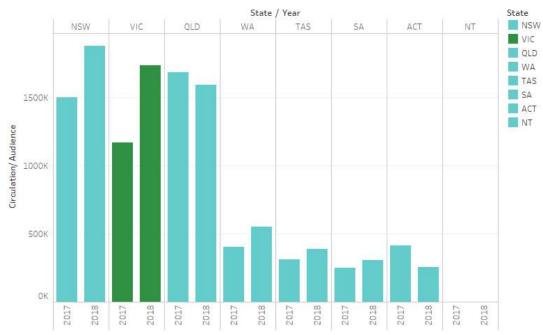




 $Sum \ of Circulation/Audience for each Year \ broken \ down \ by \ State. \ Color shows \ details \ about \ State. \ The \ data \ is filtered on Media, which keeps TV.$ 

Figure 15 - TV audience for each State in 2017 and 2018

### TV Volume



 $Sum of Circulation/Audience for each Year broken down by State. \ Color shows details about State. The data is filtered on Media, which keeps TV.$ 

Figure 16 - TV volume for each State in 2017 and 2018



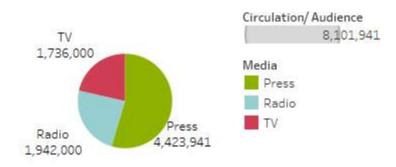


Figure 17 – Proportion of total circulation/ audience per media type in 2018

# Victorian Media Report for Science Week

Please refer to the media report provided by the Victorian publicists, Zilla & Brook, for specific details regarding Victorian articles and interviews in 2018.

### Ambassador community service announcements and radio interviews

Wrap up by Geoff Crane (Manager, National Science Week, Questacon)

National Science Week radio community service announcements were played 5733 times on 269 stations (47 hrs free airtime) nationally. The four ads were by James Cameron, Vanessa Pirotta and Jason Sharples (who did two – one for mainstream stations and one for Indigenous media).

They can be heard here:

https://soundcloud.com/national-science-week/jim-cameron-national-science-week-radio-announcement

https://soundcloud.com/national-science-week/vanessa-pirotta-national-science-week-radio-announcement

https://soundcloud.com/national-science-week/jason-sharples-national-science-week-radio-announcement

33 ambassador interviews were played on 676 stations (average interview length was 7'50", total of 81 hrs airtime). The interviews were by Adrian North, Jason Sharples, Vanessa Pirotta and Veena Sahajwalla.

The TV Community Service Announcement was played on Ten, Nine, WIN, Foxtel and regional stations.

### https://www.youtube.com/watch?v=La8efORW 7U

The total free media value was >\$1.046 million (regional and pay TV cannot be tracked, and radio community announcements are reported voluntarily by the stations).

### Social Media

Victorian Science Week utilised the Royal Society of Victoria Facebook, Twitter, and Instagram accounts for the 2018 campaign, posting regular updates, reminders, and details of events.

Figure 18 below shows the significant increase in social media reach (particularly in regards to Facebook) during July – August when promotional efforts were ramped up for Science Week.

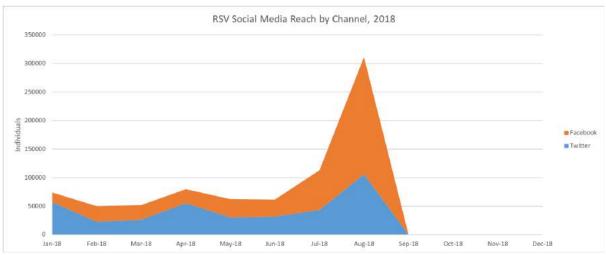


Figure 18 - Royal Society of Victoria social media reach for 2018

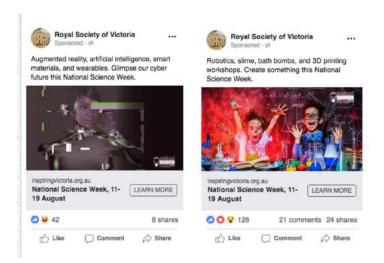
### Facebook

Events, such as the Humans 2.0 event, were advertised on Facebook with good success (see associated Humans 2.0 report), translating to booked out events (some with long wait lists).

In addition, a small targeted Facebook ad campaign was run by Cole Media for Science Week in Victoria (see ads below). These ads contained festival wide messaging and directed traffic to the Inspiring Victoria website, and were trialled for their effectiveness in the lead up and during Science Week 2018. The summary provided by Cole Media is located below.

Royal Society of Victoria, Science Week, 3-week Facebook campaign results:

- 2,005 clicks to the website with an average CPC of \$0.50c (which is quite cost efficient)
- 54K people reached across the campaign with an average message frequency of 2 ads shown per person
- Average click-through rate of 1.65% (which is above benchmark levels of 0.65%) showing that the audiences targeted were highly engaged
- Overall 7 out of 10 ad-relevance score which means the creative was quite relevant and the audience engaged with the campaign message





### **Twitter**

Twitter Trendsmap Analytics run by Science in Public (National publicist for Science Week) revealed that the RSV Twitter account ranked third for tweet volume relating to Science Week behind the National Science Week account (first) and the Sydney Science Festival (second).

The RSV Twitter account ranked fourth in the top contributors for Science Week (top contributors is calculated based on the share/re-tweet volume). However, the RSV account did not rank in the top 20 influencers for Science Week, due to its relatively small follower number.

The RSV enlisted the assistance of PhD student and RSV member, Catriona Nugyen-Robertson to increase tweet volume and website news posts during Science Week. Catriona's contribution was substantial and allowed the RSV to better support Victorian event holders and grant recipients with social media promotion for their activities.

### <u>Instagram</u>

The Instagram account was managed during Science Week by a group of University of Melbourne science communication Masters students as part of a student project, and throughout the week picked up 70 further followers.

### Considerations for 2019:

- 1. Facebook advertising should be continued based on its success in increasing awareness of Science Week programming and events.
- 2. Further science communication student volunteers should be enlisted to assist with social media during Science Week to increase volume and coverage of events.

### Awareness and participation (by Omnipoll for the National Office)

**21%** of those surveyed nationally were aware of the National Science Week (20% in 2017). The sample size was 1257 people surveyed.

TV was the most common way (45%) for people to find out about Science Week, followed by online (32%), and then through a school (21%), print media (20%), radio (18%) and word of mouth (15%). Note that some people reported multiple ways.

In Victoria, 23% of those surveyed were aware of National Science Week in 2018. Although Victoria had the highest rate of awareness of all States there is substantial room for improvement.

Of those Victorian's aware of Science Week, TV was the most common way (45%) for people to find out about Science Week, followed by online (28%), print media (24%), radio (22%), through a school (19%), then word of mouth (17%).

6% of people (around 1.2 million) live in a household nationally where someone in the home visited a Science Week event – unchanged from 2017. In Victoria, 7% of people surveyed live in a household where someone in the home visited a Science Week event. Again, this represented equal highest in the nation (alongside WA), but there is substantial room for improvement. The survey does not consider children under 5 years of age, and does not account for more than one child in a household.

In Victoria, of the 326 people surveyed, 27% reported being highly engaged with science and technology, 25% moderately engaged, 19% were passive, and 28% reported no interest.

### International Guests

In 2018, Victoria welcomed three international guests, NASA Scientists Dr Jessie Christiansen and Dr Laurent Pueyo, and US neuroscientist, Dr Larry Sherman.

The coordinator of the NASA Scientists' national tour was quite disorganised, and the last-minute cancellation of a couple of NASA Scientists slated for a Victorian visit, translated into additional stakeholder (event organiser) management, lost media opportunities, and the inability to schedule an international guest for the launch event.

Thankfully Museum Victoria (through Kate Barnard, a Vic Science Week Coordinating Committee member) was able to use their networks to allow direct organisation with Jessie Christiansen, and Larry Sherman's visit was able to be organised by a collaboration between RMIT and the RSV.

The 2018 international guests were important for media volume (see Zilla & Brook media report).





**Dr Jessie Christiansen** spoke to a total of approx. 1350 people across the following events:

- an industry breakfast event organised by the Lead Scientist's office;
- a public lecture at RMIT;
- a video live stream into regional, rural and international schools organised by Scienceworks;
- a public event at Scienceworks;
- a public lecture in Bendigo at Bendigo South East Secondary College;
- a school talk at Loreto College Ballarat organised in collaboration with Ballarat Tech School;
- a public lecture in Ballarat organised by the Ballarat Astronomical Society.

All venues and event holders provided very positive feedback regarding Jessie's talks. See the following article on the Inspiring Victoria website written by Jonathan Ridnell, General Manager of the Discovery Science and Technology Centre, Bendigo https://inspiringvictoria.org.au/2018/10/01/a-nasa-planet-hunters-visit-to-bendigo/

### Feedback from Judith Bailey at the Ballarat Astronomical Society:

"We are getting very positive feedback [from Jessie's visit], the audience like what we are doing, they learned something new. [Presentations such as these are] lifting the basic knowledge of a number of visitors, and we are gaining a number are repeat visitors, and several new members. All in all one of our best science week events over several years."

### Feedback from Jessie:

Dear Renee, Michael, and the Royal Society of Victoria team,

I wanted to thank you again for being such superlative hosts during National Science Week. Your level of care and organisation made an impossible schedule fly by seamlessly. I hope you have received a lot of wonderful feedback on the events and you deserve all of it.

I hope we can find a reason to work together again!

Cheers, Jessie (4 September, 2018)

Jessie also kindly conducted interviews for several radio stations, and newspapers such as ABC radio and the Herald Sun (see Zilla & Brook media report). In fact, there was more demand for interviews with Jessie than could be physically accommodated in the time she had with us in Victoria!

**Dr Laurent Pueyo** was a late replacement for another NASA Scientist who had to cancel his trip to Australia at the last minute. Laurent was very generous with his time given the short notice and rather gruelling travel schedule. Due to the late notice and very short duration of his trip, it was difficult to arrange media for Laurent.





Laurent spoke to approx. 1150 people across the following events:

- A primary school event, a secondary school event, and a public event (three separate events) at Emerald Secondary College in Emerald;
- An event at Quantum Victoria for secondary school students,
- A school talk at Parkdale Secondary College;
- A school talk at Toorak Girls College in Mt Eliza;
- A public lecture at Mt Martha organised by the Mornington Peninsula Astronomical Society.

All event holders provided very positive feedback regarding Laurent's talks. Laurent was also interviewed by the students of Toorak Girls College who were thrilled to receive written responses from Laurent to their questions!

Dr Larry Sherman gave a public talk at the RSV during Science Week, and a talk with Laurent Pueyo at the Quantum Victoria schools event (approx. 300 people). A highlight video of Larry Sherman's talk can be found at: <a href="https://www.youtube.com/watch?v=4SwOEcJL\_mA">https://www.youtube.com/watch?v=4SwOEcJL\_mA</a>

Although in Melbourne primarily for research purposes, Larry generously agreed to conduct several radio and newspaper interviews about his public talk at the RSV for Science Week (see Zilla & Brook media report for further details).

### For consideration in 2019:

- 1. Organise at least one international guest via the Victorian Science Week Coordinating Committee directly (pending budget and sponsors) so that they can be scheduled for the Victorian launch and pitched to the media with plenty of follow-up time.
- 2. Continue to ensure, as much as possible, that international guests are shared with regional Victoria (in 2018 guests were shared with Ballarat, Bendigo, Emerald, Mornington Peninsula, in addition to the Melbourne district). The travel distances, the short time that guests are in Victoria, and the reliance on volunteer drivers to transport the guests, means it is challenging to schedule international guest appearances in regions several hours away from Melbourne. An increased budget in this area could allow Victoria to organise guests for specific tours of regional Victoria.

# Vic Seed Grant Recipients

20 Seed Grants of \$500 each were awarded by the Victorian Science Week Coordinating Committee for 2018 Science Week activities across the following communities: Ballarat (2), Bannockburn, Beechworth and Chiltern, Berwick, Brimbank (Sunshine, St Albans, Keilor, Deer Park), Daylesford, Echuca, Geelong (2), Kangaroo Flat, Knox, Melbourne CBD (2), Mornington Peninsula (3), Whittlesea, Wodonga and Yaapeet.

Successful grant applicants were from the following organisation types: libraries (6), community organisations (6), societies (4), schools (2), Universities (1), local government (1).

Activities funded ranged from science shows, hands on science activities and workshops, exhibitions, competitions, public lectures and panel discussions, nature walks, building projections to live music performances. The topics presented represented a broad range of sciences from space science, chemistry, biology, parasitology, mathematics and coding, sustainability, and even acoustic ecology.

The total number of attendees at Vic Seed Grant supported events was 7106.

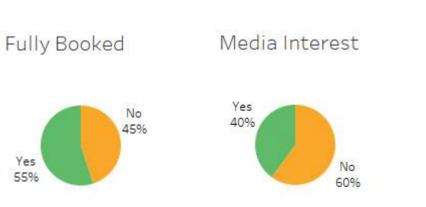
**100%** of the seed grant recipients reported that the expectations as a grant recipient were clear.

Figure 19 shows that the seed grants successfully supported many new organisations to present Science Week events for the first time in 2018. 55% of the Vic Seed grant supported events were fully booked (figure 20), which is a good result indicating the events supported were popular and relevant to the community in which they were held. 40% of the events held received media attention (figure 21). The result represents a good base from which to work in 2019 and reflects the proactivity of the Vic publicist and the grant recipients. Announcing grants and distributing media release tips earlier in 2019 will increase the time available to pitch events to the media and help to increase the number of grant funded events to receive media attention.

## First Time



Figure 19: Percentage of grant recipients running an event for Science Week for the first time in 2018



Yes 75%

Considering

Another Event

Maybe 25%

Running

Figure 20: Percentage of grant funded events which were fully booked

Figure 21: Percentage of grant funded events that received media attention

Figure 22: Percentage of 2018 grant recipients considering running events for 2019 Science Week

Figure 22 reveals that **75%** of grant recipients are considering running Science Week events in 2019. None of the grant recipients responded with a 'no' to this question (25% responded 'maybe'). This is an encouraging result and indicates that grant recipients had a positive experience engaging with Science Week.

### Selected comments from grant recipients:

"We had lots of positive feedback from the community regarding all the events. We had many children attend multiple events, and it brought people into the Library space that had never visited before. Great performance (science show), both children and parents overwhelmed. Never seen anything like it!" Brimbank Libraries.

"Thank you for the opportunity to be part of National Science Week. Having the seed grant money allowed me to take the talk to the next level which people were very impressed with. The assistance from the Royal Society of Victoria was much appreciated." Indigo Shire Libraries.

"Great to be a part of the program. Great communications and supportive of an innovative programs. This is the start of a science outreach collaboration between Unbound and TwistED Science in Echuca. Thanks!" Unbound Global Pty Ltd.

"Thank you for our funding towards the travel costs of our guest expert guide – this event would not have been possible without him and he really made the event very special, travelling 6 hours each way for it. Thankyou." Yaapeet Primary School and Enviroed4all.

"We loved being involved in Science Week! It was such a fun day and got children and their families discussing cause and effect and inspired many at home experiences. The whole week was great, so many opportunities to get involved and take a look at how science is being used and learnt in other educational settings. We can't wait for Science Week 2019!" Golden Plains Shire.

### Feedback from the grant recipients:

- 1. One grant recipient was unhappy with the Science Week posters featuring "Science as a verb", and the lack of the year on the poster. This feedback will be relayed to the National office at the National conference.
- 2. Another grant recipient was unhappy with the new t-shirt designs and requested that the lightbulb continue to be featured on some t-shirts, as the "lightbulb is a generic image suitable for all science themed events and for all ages". This feedback will be relayed to the National office at the National conference.
- 3. Earlier distribution of media release templates and information was requested by one grant recipient. This information is normally sent out by the National publicist, but in 2019 this information will be distributed to Vic grant recipients upon announcement of grants (earlier in the year) in addition to the National publicist (in the month leading up to Science Week).
- 4. Another grant recipient reported their displeasure at the grant requirement to provide two draft tweets to be distributed via the RSV (Vic Science Week) twitter account. This requirement was set up to ensure the correct information was distributed about events, and to save time crafting social media posts. However, following the 2018 campaign, it has become clear that the RSV can use event listings on the National Science Week website to craft tweets without the need to engage with grant recipients. Instead in 2019, grant recipients will be asked to provide details of posts on their social media accounts so that the RSV can repost, like, retweet, etc.

# 2018 Event Holder Survey

A short survey was sent out to all 2018 Victorian Science Week event holders through Survey Monkey. As of 7 October 2018, 48 surveys had been submitted (although not all of the surveys contained responses for all questions). Figure 23 below shows the location of those who submitted surveys.

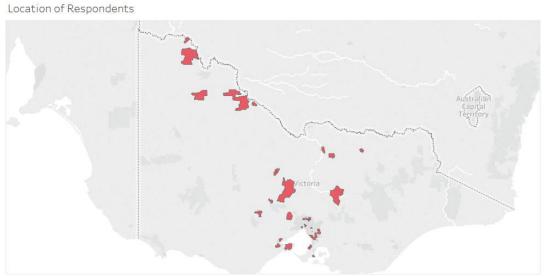


Figure 23: Location of event holders who submitted surveys

Level of Interest

The total number of event attendees is estimated at **16,275** from event holders who submitted surveys. Figure 25 shows the age groups of attendees. Pleasingly, adults (even young adults) are well represented in the attendance data.

### Level of Interest Level of Interest Strong interest No Mild Strong Mild interest Audience Type interest interest interest Unsure No interest Primary School Students 10% √65% 25% 5% Unsure Secondary School Students √50% 45% Young Adults √50% 436% × 2% 12% Adults √57% 9% 432% × 2% Elders **√**47% 435% × 5% 114%

Figure 24: Level of interest in science by age group reported by survey respondents

### Q5 Event attendees were (select all boxes which apply):

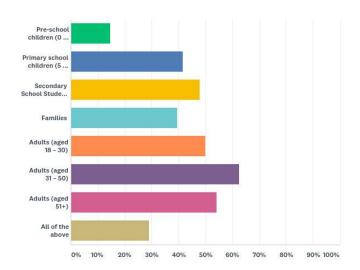
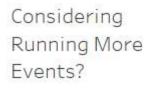


Figure 25: Event attendee age group



Figure 26: Topics of interest to local Victorian communities according to respondents



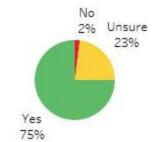


Figure 27: Percentage of respondents considering running Science Week events in 2019

Figure 24 shows respondents surveyed report mostly strong to mild interest in science within their community across all age groups, with climate change and environmental science followed by general science (STEM, all science) being the most commonly reported topics of interest for audiences in Victorian communities (figure 26). 75% of survey respondents reported that they were considering running a Science Week event in 2019 (figure 27).

Number of Responses

### Selected Comments and feedback:

### Schools focus

"National Science Week provides a focus for our Scientist in Schools partnership - and we believe this immersive block delivery of a scientific inquiry is a fabulous way for small schools to deliver excellent science learning."

18

"Tips to improve our grant applications [would be great]. We have entered the last two years - lot of effort for no return."

"Our school held our Science Night not during Science week or month because all incursions we contacted charged more during that peak time. We held it a month prior and saved money!!"

"More funding opportunities for smaller events. Our event has cost us about \$3000 each year. Fortunately, we have partners that have helped us. The funding guidelines are hard for schools to get funding for events, and the science week grants for schools are only small amounts. If minor events that engage school students, can access a grant between \$1000 -\$2000 that would be useful. Otherwise your website has some great resources, and you publicize events really well. So thanks for listening/ reading my feedback."

### Other Events

"It was great to be invited to the state launch run by the Royal Society in Melbourne, we felt acknowledged. It would be great to have some badges to give out to people to provide a sense of community eg I love science."

"[Help with] The downloading of the science short film, buffering was a great concern on the night. Could we have it as a DVD or be able to download it prior to the event? Sourcing scientists that would come and discuss things with an audience, as those that said they would (locally) did not attend. We are pleased to know that grants are/were available, though not in a timeframe that allowed us to apply."

"More regional representation in the organisation and coordination of the state-wide program."

"Humans 2.0 was a fantastic event. Well organised and designed from ground up. Amazing work team."

### Promotion

"More widespread and earlier promotion. Many attendees and also expert participants only discovered when science week was after we contacted them to be involved in our event."

"I felt that the co-ordinating team did an amazing job to support and promote our event. Thank you!"

"I felt the involvement of royal society of Victoria, and their social media presence benefited our registrations and exposure. Web site is useful, perhaps events sorted by date or type or location might be useful."

"The Science Week marketing has been very effective. Our event received a lot of interest (more than usual) and the level of no-show was minimal, This is quite different from usual behaviours for us."

### Lessons from Feedback:

Much of the feedback reinforced data collected from other sources.

- Earlier engagement of the Vic publicist would assist to increase awareness and media opportunities for event holders.
- Awareness is building regarding the Vic Seed Grants and earlier announcement of seed grants in 2019 will assist with planning and promotional opportunities. In 2019, it is proposed that we will offer further grant funding to event holders (in particular a grant scheme specifically for library events). Significant increases in funding amounts and grant number however is hampered by a lack of funds.

- Tips for grant holders can be circulated via the Inspiring Victoria mailing list and posted on the IV website.
- Feedback regarding the Scinema films will be forwarded to RiAus.
- Regarding experts and scientists to speak at events, event holders will be encouraged to contact the Victorian Science Week Lead for assistance with securing talent in 2019.
- The Science Week team will look to work with regional Victorian communities ahead of the 2019 festival. One idea which has been implemented successfully in NSW is to offer \$10K grants to regional areas to establish centres of activity/full week-long programming for Science Week run by a collaboration of local organisations in consultation with the Victorian Science Week Committee. This grant scheme is funded through the NSW IA grant. Currently, the Science Week Committee contains members from Geelong and the Mornington Peninsula in addition to Melbourne, but there is scope to recruit members from regional Victoria with improved technology making it more possible for remote members to join in meetings.

# Financial Report

PROJECT	BUDGET	ACTUAL	REMAINING
Publicist	10,500	14,000	(3,500)
Publicity	14,500	15,825	(1,324)
Visiting Talent	5,000	3,057	1,943
Launch Event	5,000	4,150	850
Humans 2.0	25,000	25,016	(16)
Vic Seed Grants	10,000	9,864	136
Collateral	5,000	1,685	3,315
Committee	-	804	(804)
Expenses			
Grand Total	75,000	74,399	601

### Notes:

- The Vic Publicist was employed for an extra month beyond what was originally quoted (Quoted figure was until the end of July, but this was extended until the end of August to cover Science Week and follow up after Science Week).
- Following the cancellation of the Space Photo project by the National office, the \$5000 allocated to this project was reallocated to the Science Week Launch event.
- Committee Expenses item includes catering for Science Week meetings, and the Science Week wrap up (thank you) event following Science Week for Committee members, volunteers, and the Committee Science Week events speakers and exhibitors.

### Forward estimates and remaining expenses:

- The remainder of the budget (\$601) is anticipated to be expended on travel associated costs (accommodation, taxi, meals) for the Science Week Chair and the IA Manager to attend the National Science Week Conference in Canberra (Nov 2019).
- Any remaining budget will be discussed with the Committee and allocated as advised.

# Ŷnational science week2018

# Humans 2.0

# 2018 survey results



Humans 2.0 was organised by the Vic Coordinating Committee and held as the main public Science Week event in the Melbourne CBD at 524 Flinders Event Space on Wednesday 15 August, 6PM – 10PM.

The event mixed speculative storytelling and immersive experiences and activities allowing audiences to explore the future of the human species, from wearables, prosthetics, robotics, AI, immersive environments, VR, to food, gardening, music, and questions about what it means to be human.

21 experts (mainly scientists, designers, and technologists) were engaged as storytellers and to construct immersive experiences. The experts came from the following organisations, 3CR, Charcoal Lane, Florey Institute for Neuroscience and Mental Health, Monash University, Murdoch Children's Research Institute, PHORIA, RMIT, Silverpond, Swinburne University, University of Melbourne, Variant X, and VicHyper. PHORIA sponsored the event, creating a new immersive and interactive environment for the event at significantly reduced cost.

Volunteers with an interest in science communication were sourced to assist with the event from the Murdoch Children's Research Institute, RMIT, University of Melbourne, and the Royal Society of Victoria.

The Humans 2.0 survey was constructed by Dr Mrinal Murali, Clinical Research Coordinator at the Baker Heart and Diabetes Institute.

### **Audience**

1098 people registered to attend the Humans 2.0 event (and a waiting list of around 250 people was also used to refill numbers as registrations were cancelled). At the event, 93 people were surveyed via iPads and paper surveys. All attendees were invited to fill in a survey upon departing the event, and in addition, randomly selected attendees were approached throughout the evening.





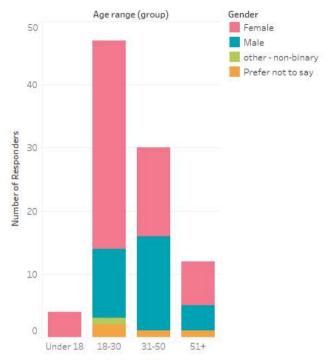
Figure 1 below shows more females than males were surveyed in all age ranges, and that the 18-30 age group was the most surveyed (this age group also recorded the highest proportion of attendees at the event, and this age group represented the targeted age group for the Humans 2.0 event).

The majority of those surveyed heard about the event either by social media (45) or from friends, family or colleagues (29), as can be seen in **figure 2**. This reflects significant effort to advertise and communicate the event particularly through Facebook. The Humans 2.0 speakers and exhibitors also spruiked the event via their networks, no doubt boosting the 'friends, family, colleague' response.

Figure 3 shows that of those surveyed just over half (51.6%) did not work or study in a STEM related field. Additionally figure 4 shows that the majority of those surveyed had not attended a Science Week event in the past (57). This is a pleasing result as the event aimed to attract those who were not currently engaged in STEM related pursuits, or had not attended Science Week events in the past.



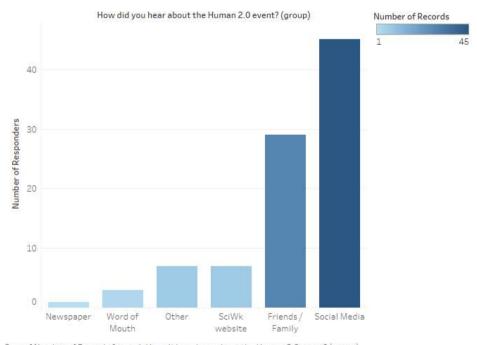
# Responders by Age, Gender



Sum of Number of Records for each Age range (group). Color shows details about Gender.

Figure 1 – Age and Gender of those surveyed

### How Did You Hear About the Event?



Sum of Number of Records for each How did you hear about the Human 2.0 event? (group). Color shows sum of Number of Records. The view is filtered on How did you hear about the Human 2.0 event? (group), which excludes Null.

Figure 2 – Medium through which attendees heard about the event

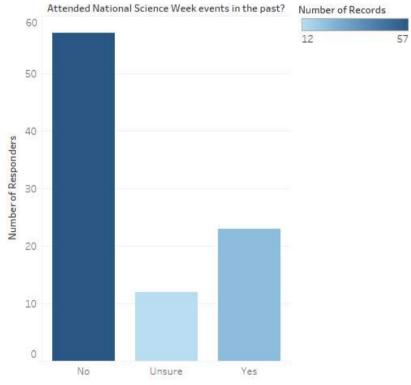
# Work/Study in STEM



% of Total Number of Records and Work/study in a science or technology related field? (group). Color shows details about Work/study in a science or technology related field? (group). Size shows sum of Number of Records. The marks are labeled by % of Total Number of Records and Work/study in a science or technology related field? (group).

Figure 3 – Percentage of surveyed respondents who study or work in STEM related field

# Attended SciWk Events Previously?



Sum of Number of Records for each Attended National Science Week events in the past?. Color shows sum of Number of Records. The data is filtered on How did you hear about the Human 2.0 event? (group), which excludes Null.

Figure 4 – Past Science Week event attendance

# The Event







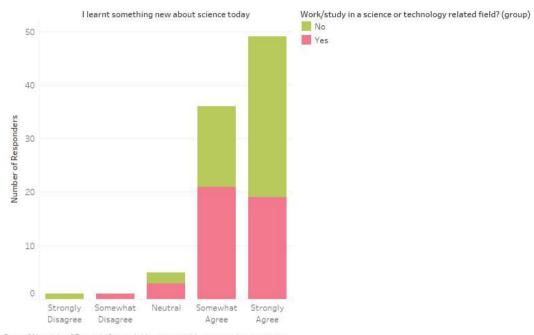






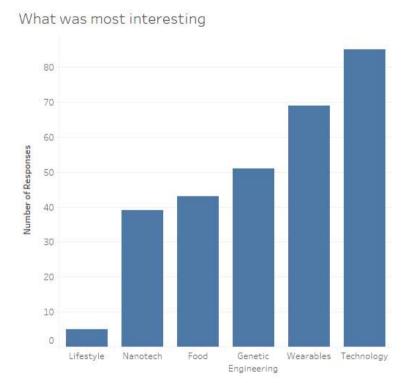
49 of the 93 surveyed strongly agreed that they learnt something new at the event, whilst 36 somewhat agreed (figure 5). Although slightly more people who did not work or study in STEM related fields strongly agreed with the statement, the data was split quite evenly between STEM workers and non-STEM workers. This result indicates that the science communicated at the event was pitched at an appropriate level so that the majority of attendees were presented with new information. The need to ensure that the majority of attendees were presented with at least some new information required balancing the need to ensure that the audience did not need to have a prior in-depth knowledge of science to be able to benefit from the event.

### I Learnt Something



Sum of Number of Records for each I learnt something new about science today. Color shows details about Work/study in a science or technology related field? (group). The data is filtered on How did you hear about the Human 2.0 event? (group), which excludes Null.

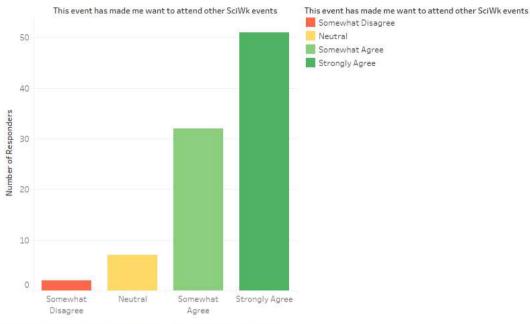
Figure 5 – Whether surveyed attendees learnt something at the event (split into those who either work or study in STEM or do not)



Food, Genetic Engineering, Lifestyle, Nanotech, Technology and Wearables.

Figure 6 – Favourite topics presented at the event

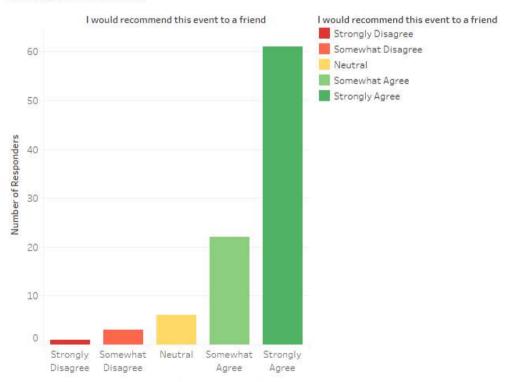
### This Event Made Me Want to Attend Others



Sum of Number of Records for each This event has made me want to attend other SciWk events. Color shows details about This event has made me want to attend other SciWk events. The data is filtered on How did you hear about the Human 2.0 event? (group), which excludes Null.

Figure 7 - Humans 2.0 as a motivation to attend other Science Week events

### Would Recommend



Sum of Number of Records for each I would recommend this event to a friend. Color shows details about I would recommend this event to a friend.

Figure 8 - Whether survey respondents would recommend the event

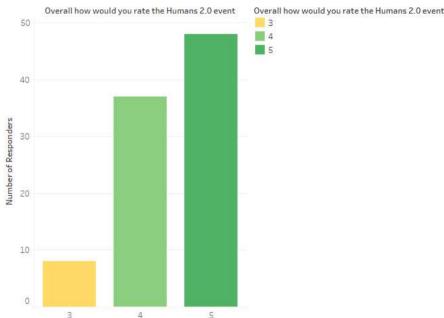
Over 65% of respondents strongly agreed that they would recommend the Humans 2.0 event to others, and a further 24% somewhat agreed that they would recommend the event (**figure 8**) - this represents 89% of the total responses.

55% of respondents strongly agreed that the Humans 2.0 event made them want to attend more Science Week events, and a further 34% somewhat agreed (figure 7) – this represents 89% of the total responses.

**Figure 9** shows the event ratings awarded by survey respondents. The rating selection presented to those surveyed ranged from 1 (poor) to 5 (excellent). None of the respondents rated the event at 1 or 2 (poor), only 8 respondents were neutral (3), whilst 37 (40%) respondents rated the event at 4, and 56 (52%) respondents rated the event at 5 (excellent).

These results indicate a strong satisfaction with the event among those surveyed.





Sum of Number of Records for each Overall how would you rate the Humans 2.0 event. Color shows details about Overall how would you rate the Humans 2.0 event.

Figure 9 – Event rating

rating range selection from 1 (poor) – 5 (excellent)

### Comments

### Venue related

One survey respondent commented about the level of noise in the venue and the difficulty in hearing the speakers. This was feedback that we received verbally by several attendees in addition to the survey response. The acoustics in the venue were of genuine concern, and should this event be run in future years, venues with separate rooms or better acoustics should be investigated. Given that this event had a definite

'party atmosphere' (which was a component of its success) care will need to be taken to ensure that the venue can still maintain the party vibe whilst allowing greater control over sound.

One survey respondent commented that the venue was too small. The 6pm timeslot was very busy for the first half an hour. Some attendees commented that they left to get dinner and returned later in the evening to avoid the crowds. Those uncomfortable with navigating crowds most likely left the venue more quickly than they otherwise might have. The venue space limited the amount of immersive experiences offered, and the number of people who could fit into the venue at any one time. A larger venue should be considered if the Humans 2.0 event be run in the CBD in future years. Unfortunately, budget constraints and the need to run the main Science Week event in the CBD in 2018 limited the type of venue that could be secured for this event.



### Event related

One survey respondent commented that they would have liked to have seen more immersive experiences included in the event. This is certainly something to consider for 2019, however a bigger venue space would need to be sourced, and a larger budget would be required to fund venue hire and further immersive experiences.

Two survey respondents commented that they particularly enjoyed the activity which included voting on whether they thought a particular entity was alive or not alive. This activity represented one where attendees needed to make decisions for themselves rather than being shown or guided through an activity. Incorporating more self-directed activities into future main CBD Science Week events should be considered.

Three survey respondents commented that they loved the food. Food was provided by Charcoal Lane (to coordinate with Greg Hampton, head chef at Charcoal Lane, speaking at the event about the future of bush foods, food security and sustainability). Another survey respondent wanted free drinks. Unfortunately, the budget won't stretch

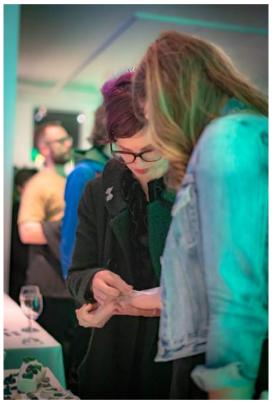
to free drinks, and since the event itself was free of charge there is certainly no obligation to offer free drinks.

One survey respondent requested more on agriculture and the environment. In 2019, the Committee could look to incorporate more of these elements in the main event or support another event in this area.

Another survey respondent wanted the event to tackle more "real life problems". The Humans 2.0 event was presented exactly as marketed - as a futuristic and speculative storytelling event, therefore whilst it referenced "real life" it was under no obligation to solve "real life problems" (whatever these may be deemed to be by the respondent). Also, real life issues, for example that what we do with AI, genetic engineering and nanotechnology now and into the future, were all presented at the event.







### Speaker related

One survey respondent commented that a couple of the speakers were not polished public speakers. Whilst this is true, the Victorian Science Week Lead believes in using Science Week public events as an opportunity to upskill STEM professionals in science communication, and to provide an opportunity for audiences to connect with and hear from different types of scientists. The Humans 2.0 event programmed a mix of experts with different communication skill levels, so that those new to public communication could learn from more experienced communicators. A two-hour prep meeting was also attended by all speakers prior to the event, where speakers had the opportunity to run through their presentations and receive feedback.

<u>General</u>
The general comments all included some form of thank you to the organisers for holding the event.

















### Media

The Humans 2.0 event was an important focal point for media publicity. The generous number of experts engaged in the event presented numerous opportunities to pitch talent and stories to a broad media range.

The Humans 2.0 event allowed articles and interviews in newspapers, online, magazines, radio, and TV to be gained. Highlights included a story on SBS, several radio interviews on ABC Radio Melbourne, and articles in the Herald Sun and Cosmos magazine. Please refer to the Zilla & Brook media report for articles and numbers relating to the Humans 2.0 event.



Three photographers documented the event – one formally organised through the RSV, one through National Science Week, and another professional photographer who attended the event as a member of the public offered their shots to the Vic Science Week Lead free of charge. The event was also filmed and a short highlights video was produced and will be used in 2019 for Science Week promotional efforts. The video can be viewed here: <a href="https://www.youtube.com/watch?v=yL\_ziavtDUg">https://www.youtube.com/watch?v=yL\_ziavtDUg</a>

# **Budget**

The total budget allocated for Humans 2.0 was \$25,000.

The expenditure for Humans 2.0 totalled \$25,016.

This represents a deficit of \$16 which has been comfortably accommodated within the total Science Week 2018 budget.