SARAH BROUGH:
Good afternoon, everyone, and welcome. I very much hope you enjoy your time with us today. I am Professor Sarah Brough. I'm the former Associate Dean of Equity, Diversity, and Inclusion in the Faculty of Science at the University of New South Wales. And I'm delighted to be hosting today's lecture on increasing the representation of women in senior roles. I'd like to begin by Acknowledging the Cammeraygal people who are the Traditional Custodians of the land from which I am joining. And I'd like to pay my respects to their Elders past and present and to extend that respect to other Aboriginal and Torres Strait Islanders who are here with us this afternoon. I also encourage all of you to Acknowledge the Land from which you are joining us in the live event Q&A panel on the right-hand side of your screen.

I'd like to Acknowledge the role of the Traditional Owners and the Indigenous people of Australia as the first knowledge creators and their very deep understanding of the land, the sea and the sky which forms a very important source of understanding of Australia, which should feed into all of our scientific understandings. Today's Inclusive Science Webinar will be recorded, so if you need to leave the presentation early or miss any part, you can watch this again at your convenience as a link to the recording will be emailed out to everyone who's registered. For today's lecture, we'll be hearing three presentations from our panellists, followed by a Q&A session where we encourage active audience participation. And welcome any questions you may have which you can enter in the live event Q&A panel from now and throughout the presentations. I'm very pleased to be hosting today's lecture as will be addressing the importance of inclusive science, acknowledging gaps in our practices, and working with our communities to create inclusive spaces and leadership. To kick off our session today, I will hand over to Professor Lisa Kewley.

LISA KEWLEY:
Thank you. Thank you, Sarah. Today, I'm gonna be talking about Closing the Gender Gap in Australian STEMM. And I'm going to be showing you how we've been closing the gender gap in astrophysics, a male-dominated area. Next slide, please.

So this is the gender gap currently in Australia STEMM. And when I'm using the term STEMM, I'm including Science, Technology, Engineering, Mathematics and Medicine. And this data is based on the Australian Academy of Science SAGE Program data. And SAGE is a version of the Athena Swan Program that was developed in the UK and requires universities to submit a range of different data. And then the SAGE program provides universities with awards, gold or silver or bronze, according to how well the organisations are going towards in one way closing the gender gap. So, increasing the representation of women at all levels within universities is now being broadened to include other forms of diversity. Now, this is the current Gender Gap based on the Australian SAGE data, and this includes 22 universities across Australia. And the purple we'll show you the fraction of women at each grade in Australia. So, we've got Postdocs starting at Grade 6 in the UK and this is Grade A or Level A in Australia going right up to Professor, which is Level A in Australia or Grade 10 in the UK. I'm also using over 100 UK universities Athena Swan data to show you the UK as a comparison point. So, the UK are shown in orange. And... Sorry, is the Australian women are shown in purple dashes and the Australian men are shown in orange dashes. And the UK women are the solid lines and UK

men are solid lines. And you can see that at the lower levels across STEMM Australia has a slightly larger fraction of women at level A Level B, but then we have almost identical fractions of women between the UK and Australia at all the senior levels. And so, this suggests that in Australia, in the UK, we've had very similar promotion, recruitment and departure rates over the last decade or two. Next slide, please. Now, we're gonna have a look at the Australian detailed data for STEMM.

So, showing you had three different histograms, the one on the left is recruitment rates. The middle figure shows you the promotion rates and the right figure shows you departure rates. And these are shown for Australian women and men and UK women and men. And there's a few things that are immediately obvious here. The recruitment rates for women and men are very different at particularly at those higher levels. And but the promotion rates for Australian women and men are fairly similar within the areas. The departure rates are also similar for men and women within the areas in Australia, except that more men are leaving at the professor level. And I think this is due to primarily more men retiring from that level at the moment, but are also being promoted into senior management positions either within or outside the university sector. Now, if we move on to the next slide. Now I take these promotion and recruitment departure rates. So, we have a look a little bit more detail at those recruitment ratios. And now what I'm doing is I'm showing you the ratio of men to women being hired, and this is just a one to one ratio at each of the different levels. And so, in Australia, which is the green line, you can see that at the Postdoc and the Lecture Level in STEM women are being employed at about the same rate as men. But at the senior level, Senior Lecturer, Reader and Professor Levels, men are being hired more than women. And in fact, it's about 1.5 to twice the rate of women. And in the UK, this is happening actually across the board. And so, this is actually contributing in the major contributor to the gender gap.

So, next slide, please. So, I'm gonna now show you, my data-driven workforce models. What I've done is I've created an Australian average university based on the academy site SAGE data. I take the initial population of males and females at each level from the SAGE data. And then using those high rates, I just showed you, I hire people into each of the levels. Based on the departure rate from the SAGE data people depart each level and then people are promoted to the next level at each year using the SAGE data promotion rates. And then I calculate the population of men and women in each level annually. And so, I can then predict the gender gap and how that gender gap will change with time. This has been tested on the HERD, the Higher Education Research Database data, and I'm able to reproduce the 2019 data starting with 1999 data, so the models are consistent across 20 year period. Now, I'm gonna show you forward modelling. Next slide, please. We're gonna start with the Status Quo Model, so this is the current gender gap that you saw before for men and women, women here in blue and the men are black. And these are just the percentages at each level in Australia. If we stick with the current population, weighted average recruitment rate, departure rates and promotion rates, here's what's gonna happen in Australia as we move forward in time. If you can click on, please. So, you can see the way we're moving forwards in time rapidly now 2040, 2045, 2040, 2050, and 2065. Now we're at 2070 The models have actually reached a steady-state or a sort of a plateau. They're not changing very much at all and this is where we will be if we continue with the current average recruitment departure and promotion rates in Australian STEMM. So, what this means is that the gender gap actually can't be closed with those Status Quo, rates. We actually need to change what we're doing. Next slide, please.

OK, so we saw before that we have unequal hiring at those higher levels, and that includes Level C, D and E. What if we were to do 50:50 hiring at all levels? So, the Australian Commonwealth Equal Opportunity for Women in the Workplace Act states that 'all employers with 100 or more employees and all higher education institutions must implement an affirmative action program to promote equal opportunity for women. And this is designed to correct for a historical underrepresentation.' Lots of universities are doing various forms of this at the moment. That includes female-only hires in some places in some departments, as well as 50:50 hiring also in some universities and some departments. And so, what also the Workplace Gender Equality Act in 2012 requires universities to lodge reports each year on how they're doing regarding gender equality indicators. Next slide, please. So, one thing that organisations can do is check using these types of models workplace forward modelling to check how their recruitment and departure and promotion rates are going to achieve 50:50 moving forwards in time. So, here's an example of what we can do in an organisation, an average organisation in Australia if we introduce 50:50 hiring. If you click on, please. Thank you. So, with 50:50 hiring the gap actually begins to close a lot faster. And by 2030, around 2035 to 2040, we've actually basically closed the gap. This is within 5%, which is about the error range of the models. And so, this is actually the only thing that we need to do in Australia for an average Australian organisation providing that we don't have a retention issue and that promotions are being done equally relative to cohorts. The only thing we need to do is 50:50 hiring. Next slide, please.

Now, this can be difficult in some areas, I'm gonna show you just quickly an example of this in astronomy. So, Astronomy is a very male-dominated field, and when I run my Gender Models for Astronomy, what it showed was that we're never going to achieve 50:50, even with 50:50 hires. And that's because retention is a real issue in astronomy and that women are leaving specific levels at about twice the rate as men in. And my model show that if we did 50:50 hiring and retention, then we're able to reach 30% women at all levels by 2039 and then 50% at most levels by around 2055. But that we also need some of...

(AUDIO FADES) any sort of reasonable time frame, by a reasonable that's around 2050. However, it actually can be done even in a beginning with a male-dominated field like astronomy. Next slide, please. So, we've done this in ASTRO 3D, which is our centre of excellence. And this is a centre covers 270 people. We begin with between 20-35% women at every level and that depended on the levels. And we... Our goal was to achieve 50:50 in four years. So, 50:50 by the end of this year, 2021. Now this is our executive management committee. We started with top-down, so 50:50 at the highest levels first. Next slide, please.

Then, well, what we did was we introduced a range of initiatives. Previously, we had a range of initiatives that are fairly standard, and then we started introducing new initiatives focusing on culture, in particular, building a positive culture and on retention. And what happened after we started introducing those new initiatives were that what we made post-doc hires and also faculty hires, we started increasing our fraction of women. And by December 2020, we'd achieved 40, around 43% women. What was surprising after that was that once we'd achieved over 40% women at the highest levels, we had low numbers of female students. We only had about 30% students that

ramped up. It doubled in a year. And so, we actually have achieved this last bit from a 43-48% women we have at the moment, but because our student numbers increased. And so, this has been rather dramatic and the students choose us not the other way round. And so this is really meant that we're actually are now attracting female students into the field, which we weren't previously doing. Next slide, please.

Now, what I think is really key about this is having women leaders, because if you don't have women leaders, then you're not attracting the applicants from female candidates and from female students in your teams. And so, this figure shows you all the different teams that we have in our centre. Each of them contain between 10 to 30 or even up to 40 people in each of these teams. And on the left of the female-led teams and on the right in the male-led teams. And this is what's happened over the four years to the proportion of women. You can see that in the female teams, we've got now over 50%....over 50%women in most of those teams. With the exception of Team five, which is an engineering team. And on, with our male leads we have almost the exact opposite effect where we're actually, is that it actually attracting more males to the teams? Next slide, please.

And so, I just wanna give a quick summary into what we've found is that you can achieve 50:50 with a range of hiring initiatives and focusing on building a positive climate. And I'm happy to talk more about that, but it is published... What we did is published in Nature Astronomy Publications. And the models are really powerful. It's not just what I showed you and my talk they can be used to test the potential impact of new initiatives, not just in hiring, but in promotions or in retention. They can provide advice on which initiatives will produce the fastest impact on diversity. I have done models of COVID-19 productivity impacts and impacts on hot staffing, freezes or cuts, and they can also be used to estimate historical implicit bias, And then they can drill down into individual universities or colleges, school departments. And this is something that I'm doing at the moment as a consultant to a range of different universities, including the University of Queensland and the ANU. They can all still be applied to other minorities. It's not specific to genders, per se, and I think I'll end there and thank you.

FIONA STAPLETON:
Thanks so much, Lisa, that was amazing. It's just wonderful to see the evidence around how you build those models and how you can test different initiatives. And so, my name's Fiona Stapleton. I'm currently the Academic Lead for Athena Swan at UNSW. I'm a Scientia, Professor and formerly the Associate Dean Enterprise in Science and Head of School of Optometry and Vision Science. And on my next slide, please, Makayla.

Thank you. So, as Lisa has described talking about the Athena Swan Program, this really provides us with a set of principles and a framework for the monitoring and evaluation of female representation in higher education, and particularly to address areas of underrepresentation in STEMM disciplines. But clearly, many of the initiatives that are described will be more broad across the institution. So, I'm gonna focus on some UNSW initiatives and just some of the data that we have, and I love Lisa's modelling on many of these numbers cause I think that would really help us understand how much changing the levers can actually make a difference to the representation.

So, UNSW was awarded a Bronze Athena Swan Award in 2018, having been part of the pilot program in Australia in 2015. And over the next kinda four years, we're working on a range of faculty and university-wide projects under the action plan. If I can have the next slide, please, Makayla, thank you. So, just a bit of information about what the Bronze Award Application does.

Essentially, this relies on collecting an amount of data across the institution, and Lisa talked about the data that's reported under the Commonwealth Act and UNSW feeds into that. And we're able to look at the data across the whole institution. And that's not just the mid-year data it may be HR, but it may be also informed by focus groups or survey-type data. And the same dataset is used for benchmarking across all institutions. So, we're able to sort of compare against other institutions. And this looks at things like staffing for both academic and professional, full time, part-time and across those, the levels across those disciplines. And it involves that mix of both qualitative and quantitative data. And the idea is that that data then informs the institution's individualised action plan based on where the gaps are and the appropriate actions that are targeted. Next slide, please, Makayla. So essentially the key action areas for you and UNSW fall into these seven areas, and as Lisa beautifully described, you know these really fall into a pipeline, career development, career breaks and flexible workplace culture for UNSW with other sorts of supporting areas in terms of other areas of diversity. So transgender, intersectionality and Indigenous Australians.

So, for today, I'd like to just focus on some of the pipeline activities, the data that inform that and some of the activities that sort of sit under that key action area. So, you can imagine that underneath each of those key action areas, there is a number of different initiatives which sort of feed into that. Next one, please. So, this was the background data, and Lisa has shown you something that's very similar to this, but this is UNSW specific data, and it's broken down by STEMM verse non-STEMM. So, you've got that sort of falling off a cliff at Level D and E for the STEMM representation, slightly different pattern amongst the non-STEMM going from a kind of a two-thirds, one-third split at Level A to a reverse split level. So again, a falling off a cliff, but a slightly different distribution there. And from Lisa's data, she was showing there that you have about 50% representation of women at those lower academic levels in STEMM, falling to about 20%. So, UNSW at least in the 2016 data that informed our action plan, was slightly below that perhaps average representation there. I'm changing the slides here, but you've got to do that, Makayla, sorry. So, I guess in terms of thinking about how a plan is put together, there's some obviously reflection on what initiatives have been shown in the literature to work. Which initiatives have been shown from an evidence-based perspective to improve female representation? And I loved Lisa's presentation here because it kind of captures all of these. So most of the initiatives that have been described in the literature kind of fall within those five areas. So, talking about organisational processes and procedures, and that might be around recruitment or promotion. It talks about the commitment of leadership within an organisation.

So, what's the culture around awareness, implementation of those procedures? Mentoring and networking is a very powerful initiative, group Initiatives, which works in terms of improving gender representation, things like job sharing, community practice initiatives, female leadership development programs. And providing the support tools to allow female retention at those higher levels and encouraging promotion. And I know Lisa Williams is gonna be talking about some of these

specific initiatives in science. One thing I really wanted to just flag here was that a really important thing is about measuring outcomes, and I think that's where I've been so excited by the Athena Swan Program in that you don't change anything unless you measure it. And from Lisa's perspective, you don't change it unless you model it. But this has been one of the things which has now found its way into outcome reporting for all levels across the university, and I'll talk a little bit about that in a moment. Button up the next slide, please. So, going back to those pipeline activities that were under the Athena Swan Bronze Award for UNSW. You can see what I've done here as I've got a bit of a laundry list of some of those initiatives that have been put in place, and I've tried to sort of group them against those targeted areas that we know have some impact based on the evidence. So, improving retention policies and procedures.

And again, I know Lisa will talk a little bit about this from the science perspective. In 2019, we had some quite a difference in terms of promotion policies and procedures. There was a balance across the promotion pillars. ROPE guidelines were introduced in 2020, so those things that are being implemented and used across the organisation not only talk to the policies and procedures but also the sort of culture of the organisation. Networks both internally and externally. And I'm sorry to use the alphabet soup here, but the early-career networks, women in research, academic women in leadership and the Women's Wellbeing Academy. These all have good evidence over time of showing an improvement in female representation in leadership and supporting from a community practice perspective. Faculty based targeted recruitment schemes have been effective in engineering and in science and in other disciplines here, and I know Lisa will talk a little bit about that. I spoke about the data reporting, and one of the things that happened as a result of the Bronze Action Plan was to embed gender targets in the council KPIs at UNSW about 40% representation of women in leadership levels, in academic positions at D and E and in professional positions at Level 10 plus. So, not only are they reported quarterly now they've also cascaded down to the fact. So again, that brings all these things to front of mind. And I wanted just to mention some emergent activities and particularly and Lisa mentioned this about COVID activities, and we are part of a group that has been looking at COVID related impacts across universities in Australia and Canada, and Rania has been leading that area at UNSW. And that's really looking very specifically at attitudes around job security and productivity with working from home, and we're looking to further assess that over time. Another initiative, which is recently emerged, is around career coaching. If I can have the next slide, please, Mikaela. Thank you.

And again, this is a new initiative, and I'm sort of speaking slightly out of turn here. This is Lizzie Muller's lead on this project. But this is recognising women with caring responsibilities, not just around children, but also looking after ageing parents or individual disability and the difficulty faced with moving into leadership roles. So, this is an initiative that's of the Women's Wellbeing Academy supported by Athena Swan, and it's to support women to undertake leadership roles when they have these other responsibilities. So, it's not only workshops and support for leadership activities, but it's also trying to look at what types of structural changes might help to support that movement, whether that's things like job sharing, Associate Dean and other leadership positions, but what are some other practical assistance that can be provided? And there is another piece to this which is advocating for evidence-based change. So, this is a primarily philanthropic funded initiative. And I would say that, you know, there's a lot of pilot initiatives that ultimately should be absorbed into business as usual for the university to make sure that they're sustainable over time. If I can have the

next slide, please. Just to talk about the next couple of years will be a process of looking at how effective those initiatives have been. It's very difficult to dissect out which ones are the most effective, but we will be looking at that. And then applying for Cygnet Awards in some of these areas, which demonstrate impact and outcome and then apply for Silver Award with a new five-year action plan is our ultimate dream. Next slide, please. So just a quick where we're at UNSW. This is the same graph I showed at the start, just showing the shift in stem and non-STEMM, the darker colours that just show the 2021 data. And you can just see there that at the D and E levels, there's been a shift of about 20% in those levels across STEMM and becoming to a sort of 55, 45 splits in the non-STEMM Professor Level. If I can have the next slide, please kind McKayla. This is just showing the reporting over time across the university for academic levels D and E in STEMM and the Professional Level 10.

So, I'm just showing the different divisions and faculties here, and you can see on the left side there the medicine really staying very static at that very high level of 40% representation of women. Science is the yellow line there, rising from about 16% to 28. So that's a massive improvement over that base. And both Engineering in Canberra, which is STEMM heavy showing there a slightly more modest but quite significant improvement over their baseline levels. With professional staff, it's a little bit more choppy. The numbers are low, so there is a little bit of variation there, but you can see a rather more positive final outcome there for particularly Canberra and Medicine. I'm showing at the bottom there just the all UNSW D and E women's representation was 28% in 2017 and 35% in 2021, 48% Professional and 54% in 2021. If I can have the next slide, please. And then this is just again picking up one of Lisa's points about representation. This is just showing the proportions of staff going for promotion. So out of the cohort that goes for promotion, what's the male-female split? And again, this is showing over time that it hovers around 50:50 for the non-STEMM groups. But in the STEMM it's more like 60:40. So, a better representation than we see amongst the academic staff.

So, within the cohorts that are going for promotion, women are represented at a higher rate. I'm showing you here the participation rate, which is based on the number of staff at the cohort of the level. So, if you're going for Level D, it's the proportion of those going for Level D versus the number that are at Level C in the cohort. So, you can see that these are the participation rounds. And you can see that 2019 there was a higher participation round as there was a change in those promotion requirements and widening I guess, the requirements around what you produce to make your case. And the success rates there are high across STEMM and non-STEMM. So, I think what this is showing is that there's a good participation rate in promotion in female staff and high success rates which is similar in STEMM and non-STEMM. Just moving on to the next slide there. So just finally, there have been various evaluations in 2017 and 2020 of the Athena Swan Program in Australia showing that it has proven to be a successful framework for improving representation. Clearly more to be done. But there is a sort of ongoing evaluation process here, so I'll stop there and hand over to Lisa.

LISA WILLIAMS:
Hi, my name is Lisa Williams. Thank you for a wonderful set-up to a presentation today by way of introduction. I'm currently Co-Associate Dean Equity, Diversity and Inclusion in the Faculty of Science and also Associate Professor in the UNSW School of Psychology. Today, I'm going to be talking to you about some of the initiatives that we've been doing within the Faculty of Science. And I'll be a little

brief on some of these points as we heard from Lisa and Fiona, who have really set the context. But to mention quickly, in the broader sense of what we've been developing within the faculty, it's important to be aware of the explicit targets for Levels D and E Academic. There is a corresponding target for professional staff, but the initiatives I'm gonna be speaking about today are really geared towards academic staff in this part. We also have the university-wide Sage Athena Swan Bronze Award and the Associated Five Year Plan as Fiona introduced. There are lots of activities going on in that remit. But specifically within the Faculty of Science. I'd like to note that the context under which we've been taking these initiatives has happened under a really supportive faculty leadership. So, our dean, Emma Johnston, made it very clear when taking up her position as dean that equity, diversity and inclusion broadly and gender equity should be front of mind in our activities. And in some ways, as part of a consequence of that, we have dedicated professional staff to support our activities, so Project Officers to help run these initiatives and also named EDI roles. So, for instance, this Associate Dean role. And I think these really set the context for being able to move the levers within the faculty specifically. So we're going today to be covering three of the four main initiatives that exist within the faculty. These are our current recruitment policy. Our Level Up Promotions Program, the Momentum Scheme for carers and the Women in Math and Science Champions Program, which I'm gonna acknowledge exists, but I'm not gonna talk about it in any detail today. So, in terms of our recruitment policy, this was first developed in 2017. We consulted and drew from best practice in higher education and other sectors in how to develop a policy that would suit both professional and academic staff recruitment and also help meet these gender targets.

So, the highlights within the guidelines, as they currently read, are that we must have one-third competitive women applicants on the shortlist and at the interview stage, one-third women of the selection panel. And the requirement that job adverts include information about EDI at the university and faculty, as well as having those job adverts explicitly placed in forums that might result in applications from more diverse pools. So, for instance, if you're hiring within physics to make sure that your job advert is going into, for instance, women in physics groups to make sure they're being seen. The current guidelines also stipulate that the selection panel members must have undergone unconscious bias training. So, as I mentioned, this policy went into place in 2017. It's a little overdue in its review, but we're currently undertaking a review in that looking at our adherence to these formal guidelines.

So, on that front, what I'm able to say right now is that the criteria for selection panel membership is uniformly met, this is enforced by HR during the selection process. The self-reported data on gender of candidates is a little bit stickier because of course, this is voluntarily provided. It turns out we have data on about 50%, so 50% of our applicants choose to self-identify their gender. So, it's a little bit hard to come to conclusions about whether we're officially meeting our guidelines there. So, in addition to that data review of where we currently stand on the guidelines, we're also considering whether those stipulations are really appropriate for what we now understand. And one of the things we're revisiting is the training requirement regarding unconscious bias training, whether that has a role in this setting and if so, what form that should take. The other thing to note is that there, since the original introduction of these guidelines, there have been university level guidelines put in place. So, for instance, the university level policy has a slightly different rule on selection panel

criteria. So, now we're talking about Level Up, which is our promotion support program. This was designed to help our staff within the faculty prepare applications for academic promotion. We modelled our program based on successful programs at other universities, for instance, the University of Sydney, and we catered the content specifically to the UNSW science context. There is a university-level promotion workshop scheme. However, we wanted to really provide information catering to our staff. Another aspect of this program worth noting is that involves a cohort model, so applicants and participants in the program are encouraged to form small groups and consult with each other, share draft applications. So, we're trying to build in a small social network within this support program. The next point, please.

So, we developed the program in 2018. The first cohort went through in the 2018/2019 rounds of promotion, and we've run it yearly sense. Now what we've decided to do over the years is kind of target where this program is sitting based on what we're seeing in some of those staff cuts that Fiona was showing a moment ago. So, in 2018/2019 we opened the program to all genders for staff going from Level C to Level D, potentially to Level D. In 2019/2020. We included Levels B to C, and in this latest round, we focus specifically on B to C. Next slide, please. So, I'm gonna present two ways to look at the outcomes these are not the only ways, and each of these has potentially some hiccups, but I will present the success rates and promotions by gender that we're seeing. So, here are the success rates of female applicants. I will say some of these numbers are relatively low, so even an unsuccessful bit from one person can push around these overall percentages quite a lot. What you see here in grey are success rates of female applicants in years that the level of program was not running. And in maroon here, I plotted the data of success rates of program applicants, sorry, program participants who ended up participating.

I think there is some evidence that success rates are continuing to be high. This isn't necessarily the area where we would see level up to have the most traction because the rates are overall very high. Next slide, please. So, here we have the number of people promoted, so one of the goals of the program is to help encourage women to apply for promotion. Of course, hoping that they are successful when they do decide. So, here we have male applicants, sorry, male promoted staff in hashed and dark maroon for women. Next please and in 20, what I've highlighted here are the years in which the level of program is run. So, particularly at the Level B and C Levels, what you can see here is a much higher count of women being successfully promoted in the years that level up this run. Now, of course, we can't identify exactly that Level up had a driving force in that, but I think the evidence here over a few years is showing increased encouragement of women to apply and ultimately be successful. Now, I'm gonna touch briefly on our momentum scheme, so this is a financial support scheme to support carers during their leave or upon return from extended leave. This has had several iterations over the years. Prior to 2019, there was one award to meet this particular cohort. It was particularly for women parents, and it was awarded at $25,000.

In 2019, we shifted the scheme to try and meet the need for more broad support within the faculty. We awarded two awards at a smaller amount. There was a budget freeze in 2021, so no awards were given. And this year we really took the opportunity to revamp this scheme to consider how we might best place our financial support to meet both of both the backlog from 2020, but also may be

a broader remit. So, we made two important decisions that I'd like to highlight here is an example of something you can do in these types of initiatives to be a bit creative. First, we opened this scheme to both academic and professional and technical staff. This is the first programme I'm aware of and the university to do that for carers, and we also extended it to caring of any type and gender-inclusive. So, this scheme is open to both male, sorry women and men staff to apply. So, in brief, I'm looking at where we are today, so we've awarded $54,000 to support 13 staff members. These include three professional and technical staff. So prior to this year, they would not have been supported and also two male staff. So, I'm excited to see the trends in that award scheme continue, hopefully into the future. And to finish off, I'd like to just note a few kinda learning lessons here broadly about where we've been with these initiatives... Oh, sorry. First, what I'm gonna do is show you where we were and where we are now. Fiona presented some of this data across STEMM, but this is specifically Faculty of Science Data. This is one way to look at whether some of these initiatives are having the impacts we want.

So, here's the classic scissor plot in July 2017. So aside from Level A, things are pretty dire and falling off quite precipitously by Level E. Where we are now is quite a nicer picture. So the scissor is closing and you can see here at the bottom the overall percentages at this combined D and E target, which the university discusses. We're at 28%. So, now to the key learning notes, the first I'd like to say is to consult widely. It's easy to develop these types of initiatives and policies without kinda being aware of the broader context, both within an organisation as well as the broader, maybe higher education research sector. It turns out you need not reinvent the wheel, so there's a great precedent around to draw from to meet the particular needs. The other thing that's been really clear in the last few years is trying to develop and evaluate these initiatives is the need to have access to data regularly in a comparable format. And I think this has to do with the kind of formal staff cuts types of data I was just showing you, but also more evaluating data. So, we do undertake participant feedback surveys from the level of participants as one example. And the third is to review and revise their initiatives regularly. So, there are other initiatives I haven't talked about today that we've launched and then stopped because it was clear that they weren't necessarily meeting our goals at the moment. So, I think with that, we'll wrap up on our Faculty of Science Initiatives and open broadly to Q&A for our remaining time.

SARAH:
That's fantastic, thank you for those three brilliant talks really summarising the picture of women in leadership in STEMM and across Australia. Bringing in that data from the UK and also kind of within our Faculty of Science UNSW was really brilliant to see those all in one space. Now is our time for a Q&A session. For those of you in the audience, please feel free to enter any questions you have into the Q&A chat box and we will ask those of our panel to start our Q&A. I have a question for Lisa Kewley

SPEAKERDASH1:
slightly selfishly based. I mean as you've shown some lovely, interesting data for how to improve things within astronomy, I'm interested to know if you have kind of some insight from your consulting how other fields with a lower fraction of women in the pipeline. So astronomy has a reasonable attraction of high degree students in...who are women. You know how do Physics and

Engineering who have a lower fraction of women and unfortunately in their pipelines, how do they then increase those fractions?

LISA KEWLEY:
Just unmuting can you... OK, am I unmuted now?

SARAH:
Yes. LISA KEWLEY: OK, perfect. Yes. So we actually and astronomy is actually not as great as you'd think in the pipeline. The students are at around 30%, so PhD students at around 30%. We've actually got a higher proportion of postdocs in Astronomy between 40-50%. That's because we're hiring from overseas. And if we were just hiring from within our own Australian pool, we'd be at 30%, you know, at a maximum across the board. I have model departments and in fact, my own astronomy department is far less than this, but also Engineering Departments and some Physics Departments as well have lower proportions of women in the pipeline. So, the Postdoc levels is lower. In almost all cases, you require 50:50 hiring, but that's often not the only problem. So usually in the areas where you've got quite a large proportion of women at all levels, there's actually significant departures of women compared to men relative to their cohorts. So, that means that the numbers of women leaving at from the Postdoc Level and also sometimes from Level C in particular, I see it a lot. You've got maybe one and a half to twice as many women leaving as men relative to the numbers that are already in those levels at the university. You want that to be equal if retention is happening at an equal rate. And so, it's often that retention measures are required in addition to some 50:50 hiring. And then I've also seen some cases where women aren't being promoted at equal rights relative to their cohorts. Women are often waiting to apply for promotion at end or it's just not being paid attention to. We actually the UK, in particular, if you look at the UK, this is a real problem to get the women to get to the higher level. This is a real barrier. And so, it actually the modelling produces different predictions for what's going to close the gender gap for different departments and different colleges and different disciplines. And that really depends on the history of the discipline.

SARAH:
Thank you, Lisa. That's really interesting. We've had so questions from the audience, if people are particularly interested in any question please feel free to click the thumbs up and I will try and use that weighting to make sure we answer those more popular questions first. So, I'll start with the first one. These are fantastic initiatives, but we need to make sure that no one is left behind what is being done to first collect data on multicultural diversity and then address issues for that cohort? I'm gonna go to Lisa Williams first.

LISA WILLIAMS:
Thanks, Sarah. So this is a really great question, and I think something to note, and I'm glad it came out because intersectionality in this space is a known factor to impacts. So pretending as if any gender equity initiatives are gonna land equally from people from other diverse backgrounds is a bit naive. The data UNSW on multicultural diversity is a self-identified culturally and linguistically diverse background. This is voluntary for staff, and so we're kind of constrained by the rates, the response rates in this space. I will leave it to Fiona, perhaps to comment on what we're seeing in the...at the kind of university-level or SAGE Athena one side of things. Within the faculty regarding multicultural diversity, we're exploring options for cultural competence training to ensure that our promotion

support schemes, for instance, are going to be, aren't going to land well for those who are evaluating them. So I'll leave it there and pass it over to Fiona.

FIONA:
Thanks very much, Lisa. So, I kind of echo the difficulty with data collection and the sort of self-identification. And I think that the data collection probably comes a little bit more from the survey type information rather than from information that HR collect. And so, some surveys focus groups were qualitative type evidence, and I think that what you say is absolutely right in that, you know, the initiatives don't necessarily bring everybody along with them. Intersectionality is something which has been recognised by SAGE. And with all of the reporting and all of the next steps in the evaluation and the Cygnet Awards and so on. They have asked that the initiatives are presented with an intersectionality lens and with other sorts of diversity type lenses so that they can be evaluated and rather than disaggregated data. The problem, I think that, as Lisa alluded to, is that because all of the data around HR is self-reported it's very hard to collect the data. It's very hard to report on the data without identifying individuals. So, and that's made things a little bit more complex, but I think things are moving in the right direction in terms of reporting on initiatives and measuring evaluating them over time.

SARAH:
And I'd love to hear from Lisa Kewley as well.

Lisa, you're muted.

LISA KEWLEY:
Got it.

Sorry, it's taken me a while to unmute. Can you just repeat the question?

SARAH:
Just to say, sorry...

LISA KEWLEY:
I mean, it was about other forms of diversity?

SARAH:
Yeah. LISA KEWLEY: Yeah. So from a modelling perspective, we don't have access to any statistics on the other forms of diversity through the Athena Swan or the SAGE Program data, because that was really provided in terms of gender. One of the recommendations from the models is that universities be required to in future provide in particular numbers of people from different ethnic or cultural backgrounds or members of Indigenous and Torres Strait Islander communities and that this is something that could be self-reported. People don't have to report that, but it could be a choice. And that would allow us to actually model those groups. And there's nothing in the models that says it has to be, you know, gender it's basically just one population and another population can be modelled. It can be anything really, could be people with disabilities also.

SARAH:
OK, I know that we are running short on our scheduled meeting time. So, I'd just like to ask one, there is one more question that got lots of thumbs up. So, we'll ask Lisa Williams. Can I ask what activities are the momentum spinning funds to be used for in particular, kind of used for teaching buyout context considering reduced teaching workload, the staff returning from leave?

LISA WILLIAMS:
That's an excellent question, so we have a scheme for academic staff on continuing or convertible contracts and then those on fixed-term contracts and professional and technical staff. So, to keep it brief for our continuing and convertible contract academic staff, they can apply to use the funds for any number of activities to support teaching our research. We haven't had to date any applicants for official teaching buyout, but we do list, for instance, an example to pay for a head tutor to help out with coordinating roles. So it would depend on the applicant how they want to divvy up their awarded funds and approval president ahead of school about arranging buyout if there is a staff there to support the activity.

SARAH:
OK, that's great. Thank you, Lisa. I'm going to acknowledge the time and say, you know, we've now reached the end of today's events. And I'd like to thank all of the audience for joining us today. I'd also like to extend a sincere thank you to Professor Lisa Kewley, Fiona Stapleton and Lisa Williams for their wonderful presentations and sharing their expertise and their experiences with us today. I'd also really like to thank Mikaela Viray and Kira West for their work behind the scenes in pulling this event together and also running the live event today. This presentation has been recorded and will be made public and shared with everyone who's registered for the event today. If you've got a spare few minutes now, there will be a link to a feedback survey shared by the Q&A chat function, and we would appreciate any feedback you have on today's virtual event. We'd also like to invite you to join our Student-Led Inclusive Science Series event next week on September 28th, which will focus on the Neurodiversity Movement in Science. And the link to register for this event will also be included in the chat. And with that, I'll say thank you very much, everybody.