## SAGE

SCIENCE IN AUSTRALIA
GENDER EQUITY

## SAGE Cygnet Awards for the SAGE Athena Swan Accreditation Pathway



## Edith Cowan University (ECU) Application Form

Recruitment of females into professorial research roles at ECU

## CONTENTS

GLOSSARY ..... 4
KEY BARRIER ..... 6
EVIDENCE OF BARRIER ..... 6
Evidence for sub-barriers. .....  .6
ACTIVITIES AND OUTPUTS ..... 10
OUTCOMES ..... 12
IMPACT ..... 18
FURTHER ACTION ..... 20

## SAGE Cygnet Award Application

| Name of Institution | Edith Cowan University (ECU) |
| :--- | :--- |
| Date of Application | December 2023 |
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| ALEV | Academic level |
| :---: | :---: |
| ALEVA | Associate Lecturer |
| ALEVB | Lecturer |
| ALEVC | Senior Lecturer |
| ALEVD | Associate Professor |
| ALEVE | Professor |
| AS | Athena Swan |
| ASPEO | Academic Staff Performance Expectations and Outcomes Framework |
| ASBA | ECU's Athena Swan Bronze Application document |
| ASBAP | ECU's Athena Swan Bronze Action Plan |
| CaLD | culturally and linguistically diverse |
| DVC | Deputy Vice-Chancellor |
| DVC(R) | Deputy Vice-Chancellor (Research) |
| DVC RF | Deputy Vice-Chancellor (Regional Futures) |
| ECU | Edith Cowan University |
| ECUASCC | ECU Athena Swan Charter Committee |
| FTE | Full Time Equivalent hours worked by one employee on a full-time basis |
| HRSC | Human Resources Service Centre |
| +M (after STEM) | Medicine [includes Schools of Nursing and Midwifery (SNM) and School of Medical and Health Sciences (SMHS)] |
| ODVC(R) | Office of the Deputy Vice-Chancellor (Research) |
| ODVC RF | Office of the Deputy Vice-Chancellor (Regional Futures) |
| SENG | School of Engineering |
| SMHS | School of Medical and Health Sciences |
| SNM | School of Nursing and Midwifery |
| SSCI | School of Science |
| STEM | science, technology, engineering, and mathematics [includes Schools of Engineering (SENG) and Science (SSCI)] |
| STEMM | science, technology, engineering, mathematics, and medicine |
| Tracking Dashboard | ECU 's Tracking Dashboard that monitors the ECU Athena Swan Bronze Action Plan 2018-2023 |
| VC | Vice-Chancellor |
| VCPRF | Vice-Chancellor's Professorial Research Fellow |
| VCRF | Vice-Chancellor's Research Fellow |
| WA | Western Australia |

## INSTITUTION NAME: SAGE CYGNET 4

Word limit - $\mathbf{2 5 0 0}$ words (excluding the institutional context and excluding the action plan)

|  | $\checkmark$ <br> Current Cygnet | Barrier <br> 'List the Barrier addressed in this Cygnet <br> - List the Barrier for Cygnets already submitted |
| :--- | :--- | :--- |
| Institution-wide barrier |  | Flexible Working Arrangements (FWA) |
| Sub-group barrier |  | Inadequate support systems inhibiting the promotion <br> of women in STEM(M), specifically into academic <br> levels C - E |
| Sub-group barrier |  | Decreasing gender disparity in the School of <br> Engineering (SENG) |
| Sub-group barrier | $\checkmark$ | Recruiting females into professorial research roles at <br> ECU |
| Sub-group barrier |  | Addressing diversity in the School of Nursing and <br> Midwifery (SNM) |

## A note on language

ECU's data collection systems collect data on the basis of sex (male/female) rather than gender. This is reflected in the language used in this Cygnet application.

## KEY BARRIER

The Key Barrier was identified as the lack of recruitment of females into research roles, particularly professorial level research roles, at ECU.
At ECU, most, though not all, professors are professorial research roles. One academic staff member is a 'Teaching only' Professor. In addition, an Executive Dean of a School can be allocated the title of Professor when taking on that role. All academic staff perform combinations of teaching and learning, research and research training, and University leadership, within their respective capacities.

For the purposes of this Cygnet, the professorial data (Academic Level E [ALEVE]) presented reflects the professorial research cohort only.

## EVIDENCE OF BARRIER

ECU's previous Strategic Plan 2017-2021 included the aim of recruiting highly skilled academics to the University. However, in 2017 as part of the work towards the Athena Swan (AS) Bronze Award and Action Plan (ASBAP), ECU assessed the recruitment of female academic staff into university research roles. It observed that a significant gender imbalance favouring males over females existed.
The Key Barrier to the recruitment of females into professorial research roles at ECU consists of three fundamental sub-barriers, all of which impacted the ability of ECU to address gender disparity.
These three sub-barriers are:

| Sub-barrier 1: | The overall low number of females in professorial research roles both across ECU and at the <br> individual school level. |
| :--- | :--- |
| Sub-barrier 2: | The lack of a pipeline of female research academics. |
| Sub-barrier 3: | A low number/proportion of females being appointed through the Vice Chancellor's Professorial <br> Research Fellowship Scheme. |

## Evidence for sub-barriers

## 1. Overall low number of females in professorial research roles both across ECU and at the individual school level.

In 2017, ECU had female staff representing only $28 \%$ of the professorial cohort (Table. 1 \& Figure. ${ }^{11}$ ). However, the disparity was more telling at the school-level, notably more male professors than female professors in the Science, Technology, Engineering, Mathematics and Medicine (STEMM) schools, i.e., Schools of Science (SSCI) and Medical and Health Sciences (SMHS).

Also, the School of Engineering (SENG) and the Western Australian Academy of Performing Arts (WAAPA) were noted for further investigation, as SENG had no professorial researchers (one male professor not included in the count was the Executive Dean of the School), and WAAPA had no female professors and only one male.

Additionally, it is important to note, while not as wide in disparity, the School of Business and Law (SBL) and Arts and Humanities (SAH) also demonstrated gender imbalances (Table.1). The School of Nursing and Midwifery (SNM), the School of Education (SEDU), (Table.1) had more or equivalent numbers of female professors.

## 2017 Professorial (ALEVE) Staff Headcount (Female - F, Male - M)

| Gender | Headcount |
| :--- | :---: |
| \# Female (F) staff at ALEVE | $14(28 \%)$ |
| \# Male (M) staff at ALEVE | $36(72 \%)$ |
| Difference between F and M | -22 |

2017 Professorial (ALEVE) Staff Headcount by School

| School | SAH | SBL | SEDU | SMHS | SNM | WAAPA | SENG | SSCI |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# F ALEVE | $\mathbf{3}$ | $\mathbf{2}$ | $\mathbf{2}$ | $\mathbf{4}$ | $\mathbf{3}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |
| \# M ALEVE | $\mathbf{5}$ | $\mathbf{7}$ | $\mathbf{0}$ | $\mathbf{1 4}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{9}$ |
| Difference between F and M | -2 | -5 | +2 | -10 | +3 | -1 | $\mathbf{- 1}$ | -9 |

[^0]

Figure 1. 2017 data of staff headcount females and males ALEVE
This low overall number of female professors across ECU had inadvertent consequences. Not only did it diminish the visibility of senior role models for aspiring female academics, particularly those working in male-dominated disciplines across STEMM, but it also contributed to a widened Gender Pay Gap (GPG).
At this time, there were also disproportionately lower numbers of females in professorial positions compared to other academic levels. Overall, there were approximately equal numbers of females (30) and males (35) at ALEVD but a substantial reduction at ALEVE (Table.2). To further investigate, the University closely examined gendered breakdowns at each Academic Level to better understand the career trajectory of females and through what mechanisms they progress their careers (e.g., academic promotions - refer to ECU Cygnet Award \#2).

## 2017 Overall Staff Headcount by Academic Level and Gender

| School | ALEVA | ALEVB | ALEVC | ALEVD | ALEVE |
| :--- | :---: | :---: | :---: | :---: | :---: |
| \# Female staff | $47(59 \%)$ | $140(58 \%)$ | $79(51 \%)$ | $30(46 \%)$ | $14(28 \%)$ |
| \# Male staff | $33(41 \%)$ | $101(42 \%)$ | $77(49 \%)$ | $35(54 \%)$ | $36(72 \%)$ |
| Difference between female and male | +14 | +39 | +2 | -5 | -22 |

Table 2. 2017 Overall Staff Headcount by Academic Level and Gender

## 2. The lack of a pipeline of female research academics

Analysis of the 2017 pipeline of female academics (Table.2) showed that overall, there was a substantial reduction in the proportion of females from ALEVD to ALEVE, though the downward trajectory of female's representation, actually began from ALEVB-C. This is $60 \%$ at ALEVA-ALEVC ( 266 females from 477 staff) decreasing to 40\% at ALEVD/E (44 females from 115 staff).

In Science, Technology, Engineering, Maths (STEM) schools, SENG and SSCI showed underrepresentation of females at all levels, dropping from only $27 \%$ females at ALEVA-ALEVC (21-55 females to males) to $14 \%$ at ALEVD/E, with no female professors. This showed little pipeline for females to be promoted into professorial roles.

2017 Staff Headcount by Academic Level and Gender for Science, Technology, Engineering and Maths (STEM) Disciplines (SENG and SSCI)

| School | ALEVA | ALEVB | ALEVC | ALEVD | ALEVE |
| :--- | :---: | :---: | :---: | :---: | :---: |
| \# Female (F) staff | $3(27 \%)$ | $15(33 \%$ | $3(14 \%)$ | $4(24 \%)$ | $0(0 \%)$ |
| \# Male (M) staff | $8(73 \%)$ | $28(67 \%)$ | $19(86 \%)$ | $13(76 \%)$ | $9(100 \%)$ |
| Difference between female and male | -5 | -13 | -16 | -9 | -9 |

Table 3. 2017 STEM Schools Staff Headcount by Academic Level and Gender disaggregated into discipline areas.
In a reverse gender disparity pattern, females dominated ALEVA-ALEVC in SNM at 90\% (36F:4M), and there were no men above ALEVB. In SMHS, female academics dominated at ALEVA-ALEVC at $68 \%$ (61F:29M) but this dropped to $42 \%$ (12F:19M) at ALEVD/E. The AS Bronze identified that this was a result of the recruitment of predominantly male professors in 2016/17.

It is evident that the downward trajectory in representation began at ALEVB to ALEV C (Table.4). While these disciplines did have a potential pool of females who could progress through to more senior levels, there was a 'bottleneck' at ALEVB-C (see Cygnet 2).

2017 Staff Headcount by Academic Level and Gender for Science, Technology, Engineering, Maths and Medicine (+M) Disciplines (SNM, SMHS)

|  | ALEVA | ALEVB | ALEVC | ALEVD | ALEVE |
| :--- | :---: | :---: | :---: | :---: | :---: |
| \# Female staff | $14(70 \%)$ | $59(80 \%)$ | $24(67 \%)$ | $11(69 \%)$ | $7(35 \%)$ |
| \# Male staff | $6(30 \%)$ | $15(20 \%)$ | $12(33 \%)$ | $5(31 \%)$ | $14(65 \%)$ |
| Difference between <br> female and male | +8 | +44 | +12 | +6 | -7 |

Table 4. 2017 Staff Headcount by Academic Level and Gender disaggregated into discipline areas.
As this Cygnet is about the whole professorial research cohort, not just in STEM(M), data for SBL, SAH, SEDU and WAAPA showed the gender representation is closest to parity in these schools, as shown in Table 5. However, gender disparity still existed, especially with increasing career seniority, with the lowest number/proportion of females in ALEVE in these schools.

## 2017 Staff Headcount by Academic Level and Gender for Arts, Humanities, Social Sciences, Business and Law

 (AHSSBL) Disciplines (SBL, SAH, WAAPA, SEDU)|  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | AHSSBL) Disciplines (SBL, SAH, WAAPA, SEDU) | ALEVB | ALEVC | ALEVD | ALEVE |
| \# Female staff | $30(61 \%)$ | $66(53 \%)$ | $52(53 \%)$ | $15(47 \%)$ | $7(35 \%)$ |
| \# Male staff | $19(39 \%)$ | $58(47 \%)$ | $43(47 \%)$ | $17(53 \%)$ | $13(65 \%)$ |
| Difference between <br> female and male | +11 | +8 | +9 | -2 | -6 |

Table 5. continued 2017 Staff Headcount by Academic Level and Gender disaggregated into discipline areas.

## 3. A low number/proportion of females being appointed through the Vice-Chancellor's Professorial Research Fellowship Scheme.

The Vice-Chancellor's Professorial Research Fellowship (VCPRF) Scheme enables the ViceChancellor to directly and rapidly respond to opportunities to recruit talented, world leading professors where the appointment will enhance the University's research profile and reputation, and where the appointee would be judged to be outstanding if being assessed through the normal recruitment processes.
While this is not the only way to be recruited into a professorial research role at ECU ${ }^{2}$, the Scheme allows a number of professors to be hired in a single targeted recruitment round and it has been the principal way in terms of sheer numbers, by which ECU has increased the number of females in ALEVE roles.
All VCPRFs appointees are recruited into research-only positions, though some appointees have had mixed teaching-research roles in the first three years of their appointment. At the end of the agreed three-year term, Schools, or an external funding body, are required to meet all costs of the ongoing appointment of the professorial appointees ${ }^{3}$.

The very first VCPRF campaign (2015-2017, preceding a systemic approach to AS at ECU) resulted in 14 males and 4 females being appointed.

A key issue was the attraction of applications from females, with 65 female applicants to 168 men (Figure.2/Table.6.). Also noteworthy was the lower proportion of these female applicants being shortisted, given their success rate when shortlisted was in fact slightly higher than their male counterparts. This demonstrated action was needed to increase applications from females and to improve equity in shortlisting.

[^1]Figure 2. Professorial Research Fellow appointment and applicant success by gender (2015-2017)


Table 6. Professorial Research Fellow appointment and applicant success by gender (2015-2017)

## ACTIVITIES AND OUTPUTS

Since 2015, to improve the recruitment of females into research roles, particularly professorial level research roles, ECU has focused on two key Schemes [both overseen by the Deputy Vice-Chancellor (Research)]; the Vice-Chancellor's Professorial Research Fellowship (VCPRF), where there were already acknowledged gender barriers, and a subsequent new initiative in 2019, the ViceChancellor's Research Fellowship Scheme (VCRF).

| Scheme Title | Description | Dates Active |
| :--- | :--- | :--- |
| VCPRF: The Vice- | Commenced the first recruitment round in 2015. Aimed <br> at the rapid recruitment of high-level professors <br> Chancellor's | 2015-present |
| Professorial Research <br> (Academic Level E) across the University. |  |  |
| Fellowship Scheme | Commenced the first recruitment round in 2019.Aimed | 2019-present |
| VCRF: The Vice- <br> Chancellor's Research <br> Fellowship Scheme | at Academic Level B and C to build a pipeline of <br> researchers and thus eventually grow the professorial <br> research cohort. . |  |

The schemes aim to achieve the following two objectives:

Objective 1) Grow the pool of research academics on the pathway to a professorial role.

| Activity | Description |
| :---: | :---: |
| 2019 - Introduction of the ViceChancellor's Research Fellowship (VCRF) Scheme | ECU launched a new national recruitment campaign to attract outstanding early and mid-career researchers to ECU with a Vice-Chancellor's Research Fellowship. The aims were: <br> - To build a pipeline of researchers to become professors in the future. <br> - To develop ECU's research capacity in specific areas. <br> - To maintain a focus on recruiting females into the area which ECU determined had an under-representation of a particular gender, (particularly females in STEM areas and males in the nursing discipline). <br> - To increase the number of females in the pipeline allowing ECU to 'grow their own' by having female research academics progress through the system and ultimately attain professorial status. |
| 2020-2022 - Recruitment freeze | Due to the global pandemic and its financial impacts, the VCRF recruitment campaign did not proceed over 2020-2022. |
| 2021 - Formal review of the VCRF Scheme (along with VCPRF review below in Table 9) | - An internal review of the two Schemes was conducted by the Office of the Deputy Vice-Chancellor (Research) [DVC(R]) in 2021. The review sought to understand the impact of the Schemes on the research performance and culture of the University, to identify any immediate improvements to the Schemes, and to inform decisions about the future design of the Schemes. <br> - The review involved four stages: <br> - Analysis of the research excellence performance outcomes of the Fellows bearing in mind, this was only able to cover an 18-month period. <br> - Face-to-face interviews with eight Executive Deans. <br> - Online written surveys from the 12 continuing VCRFs <br> - Online written surveys from the HDR supervision and research grant writing mentors (VCRFs only). <br> - The Key GEDI finding was that greater consideration is required in future recruitment rounds of gender equality, diversity, and inclusion factors. |
| 2023 - VCRF Guideline revision | In July 2023, guidelines for the VCRF Scheme were revised to enhance gender equity in recruitment. <br> - During VCRF recruitment round shortlisting, Schools are required to shortlist their top three candidates with at least one of the shortlisted applicants to be female. <br> - Recruitment Selection Panel Chairs have the power to co-opt up to two additional members to ensure balanced perspective, specialised knowledge, equity, and gender balance. <br> - Clause added to focus on equity, diversity, inclusion and belonging, with efforts being directed to applicants from a range of diverse groups with particular attention to females. |

Table 7. Activities and outputs to: Grow the pool of research academics on the pathway to a professorial role.

Objective 2) Recruit more female Vice-Chancellor's Professorial Research Fellows than males to ensure a gender-balanced pool of professorial researchers at ECU.

| Activity | Description |
| :---: | :---: |
| Leadership of the VCPRF | - A decision was made to ensure ongoing oversight, leadership and monitoring of the program by the $\operatorname{DVC}(R)$ to ensure deliberate actions to drive this initiative. |
| 2018-2019 - Updates to the recruitment process for the VCPRF Scheme | Updates were made to the recruitment process for the 2018 and 2019 VCPRF Scheme. <br> To improve application numbers from females these included: <br> - Reframing the PRF Recruitment Campaign to target females. This was done in a number of ways including: <br> 1. Highlighting ECUs female friendly culture. <br> 2. Including benefits which would appeal to females such as flexible working arrangements (for those who may have parental responsibilities). <br> 3. Gender neutral writing. <br> 4. Advertisements in diverse places rather than standardised recruitment agencies, for example, <br> - Sharing recruitment information directly from ECU <br> - Utilising social media related to ECU schools such as Linkedln platforms. <br> - Already employed professors sharing recruitment advertisement to their networks <br> - And overtly improving the identification of, and engagement with, potential female candidates through HR processes (such as early call back of applicants at time appropriate intervals). <br> To improve female representation on the shortlist these included: <br> Giving preference to female candidates for future PRF (an Athena Swan Action Item monitored by the $\operatorname{DVC}(R)$ and reported to the Athena Swan Charter Committee (ASCC) and University Executive (UE). |
| $\begin{aligned} & 2020-2022-\text { Recruitment } \\ & \text { freeze } \end{aligned}$ | Due to the global pandemic and its financial impacts, the VCPRF recruitment campaign did not proceed over 2020-2022. |
| 2021 - Formal review of the VCPRF scheme (along with VCRF review above in Table 7) | - See information about the review aims, process and findings in Table 7 above. |
| $\qquad$ | In October 2022, the Guidelines for the Scheme were updated and the VCPRF Scheme was re-opened with new parameters for 2022 and 2023 applications including: <br> - There is no longer a specific agenda to hire more females than males overall. The focus is now predominantly on hiring females in underrepresented areas and ensuring no men are hired into those areas instead. However, a gender balanced cohort overall continues to be a key consideration when selecting and hiring VCPRFs moving forward. <br> In the Guide To Appointments Professorial Research Fellowships and the Recruitment, Selection and Appointment Guidelines there are updates including: <br> - Updates to the 'equity statement' to now include more direction to guide around inclusion and belonging. <br> - Updated statement to ensure 'each and every staff member to be responsible for fostering an inclusive culture, upholding the principles of equity and fairness, demonstrating behaviours consistent with ECU's Code of Conduct including reflecting ECU's Values'. <br> Focus on the selection process not just the appointment process. <br> Inclusion of a focus on Aboriginal or Torres Strait Islander people as well as gender and other underrepresented groups. <br> - Where a Recruitment Agent is engaged the recruitment activity will be conducted in accordance with Position, Recruitment, Selection and Appointment Policy. and the Diversity and Inclusion Employment policy (specifically referring to the item on Gender Equality and committed to removing the barrier for this, and other, underrepresented equity groups. |

Table 8. Activities and output: Recruit more female Vice-Chancellor's Professorial Research Fellows than male to ensure a gender-balanced pool of professorial researchers at ECU.

## OUTCOMES

ECU had the following targets to achieve:

| Target 1: | Increased number of female research professors to achieve gender balance (40:40:20) across ECU <br> and in individual schools (achieved overall, though with clear discipline differences. See Item 1 below) |
| :--- | :--- |
| Target 2 | Increased pool of female research academics on the pathway to professorial roles (achieved, though <br> with clear discipline differences. See Item $2.1 \& 2.2$ below) |
| Target 3: | More females than males appointed as VC Professorial Research Fellows (achieved. See Item 3 below) |

## 1) Increased number of female research professors to achieve gender balance (40:40:20) across ECU and in individual schools.

Across ECU, over the past five years ECU has proactively tracked professorial hires and analysis has shown a 107\% increase in the number of female ALEVEs, from 14 in 2017 to 29* in 2023 (Table.9). Male professorial recruitment occurred at a lower rate, with a $19 \%$ increase from 2017 to 2023. Overall gender balance has been achieved with $40 \%$ of ECU's professorial cohort female, and $60 \%$ male, a substantial improvement from 2017 where $28 \%$ of ECU's professorial cohort were female compared to 72\% male.

| 2017 v 2023 Professorial Staff Headcount (Male - M, Female - F) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 2 3}$ | Total |  |  |
| \# Female staff at ALEVE | $14(28 \%)$ | $29^{*}(40 \%)$ | +15 |  |  |
| \# Male staff at ALEVE | $36(72 \%)$ | $43^{*}(60 \%)$ | +7 |  |  |
| Difference between F and M | -22 | -12 | +8 |  |  |
| Difference between the 2017 and 2023 gap | $+\mathbf{+ 1 0}$ |  |  |  |  |

Table 9. 2017 v 2023 Professorial Staff Headcount
*2023 data capture reflects the current status and hence does not cover the full year in totality.
Across ECU schools, there has been an increased number of female research professors in all Schools except WAAPA and SENG, which still have no female professors. However, there has also been an increased number of male research professors in SBL, SENG, SSCI.

The proportion of female research professors has increased in SAH, SMHS and SSCI. Gender disparity still prevails in all disciplines except SAH ( $57 \% \mathrm{~F}: 43 \% \mathrm{M}$ ), most notably in STEM disciplines where females are underrepresented and in SNM and SEDU where men are underrepresented (Figure.3/Table10.).

| 2017 v 2023 Professorial Staff Headcount by School ALEVE - detailed breakdown |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School | SAH | SBL | SEDU | SMHS | SNM | WAAPA | SENG | SSCI |
| \# F staff ALEVE 2017 | 3 | 2 | 2 | 4 | 3 | 0 | 0 | 0 |
| \# M staff ALEVE 2017 | 5 | 7 | 0 | 14 | 0 | 1 | 0 | 9 |
| \# F staff ALEVE 2023 | 8 | 3 | 4 | 6 | 6 | 0 | 0 | 2 |
| \# M staff ALEVE 2023 | 5 | 10 | 0 | 13 | 0 | 1 | 2 | 12 |
| F and M - 2017 V 2023 | $\begin{aligned} & +5 \mathrm{~F}, \\ & =M \end{aligned}$ | $\begin{aligned} & +1 F, \\ & +3 M \end{aligned}$ | $\begin{aligned} & +2 F, \\ & =M \end{aligned}$ | +2F, -1 | +3F, =M | =F, =M | =F, +2M | +2F, +3M |
| 2023 Difference F to M | +3 | -7 | +4 | -7 | +6 | -2 | -3 | -11 |
| 2017 Difference F to M | -2 | -5 | +2 | -10 | +3 | -1 |  | -9 |
| 2017 V 2023 gap change | +5 | -2 | +2 | +3 | +3 | -1 | ${ }^{-3}$ | $-2$ |

Table 10. 2017 v 2023 Professorial Staff Headcount by School ALEVE

| Action 2.2 | Review outcomes of research data to further disaggregate by teaching, research and service roles |
| :--- | :--- |
| Action 3.1 | Actively pursue recruitment for a female Professor in SENG who can provide an aspiration role model. |



Figure 3. 2023 Professorial Staff Headcount by School ALEVE
School-level gender disparities will continue to be a focus for ECU into the future and for the Institutional Silver application. Schools such as SAH, which traditionally comprises female-dominated disciplines including with a female-dominated student cohort, is different to schools such as SBL and WAAPA, who have a more mixed student cohort. Humanities and social science disciplines attract more students than any other subject areas - the majority of whom are women. Stereotypes continue to prevail in schools and tertiary education institutions, that boys are better at maths and science, while girls excel at English and the humanities, and this impacts women and girls preference for humanities subjects.

The new Executive Dean for SAH (appointed Jan. 2022) is a member of University Executive and thus strongly subscribed to Athena Swan through the fortnightly Standing Item for the University Executive's meetings. He is also a male champion and employed an active recruitment strategy in SAH under his leadership over the past two years.

In addition to the VCPRF scheme and normal recruitment practices, ECU does not just rely on only hiring females into professorial positions. There are deliberate plans to promote females within ECU, to contribute to achieving the gender-balanced professorial cohort. However, due to the COVID-19 pandemic [text redacted] where senior female academic staff are already underrepresented.
As the gender-balanced was not achieved in all schools, this remains a gap for ECU that will be investigated as part of the Institutional Silver Award, to ensure if any strategies employed by highperforming schools can be used in those with low female professorial staff numbers.
2) Increased pool of female research academics on the pathway to professorial roles

## 2.1: Improved pipeline of female research academics

Overall, there has been an increase in the number of academics (2017: 592 academics, 2023: 679). The proportion of females overall has increased slightly (2017: 52\% female, 2023: 56\% Female), see Figure 4.


Figure 4. 2017 v 2023 Academic Staff Headcount by Gender and Academic Level

|  | Year | Females | Males |  | Females |  | Males |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALEVA | 2017 | 47 | 33 | $59 \%$ | $41 \%$ |  |  |
|  | 2023 | 53 | 41 | $56 \%$ | $44 \%$ |  |  |
| ALEVB | 2017 | 140 | 101 | $58 \%$ | $42 \%$ |  |  |
|  | 2023 | 173 | 110 | $61 \%$ | $39 \%$ |  |  |
| ALEVC | 2017 | 79 | 77 | $51 \%$ | $49 \%$ |  |  |
|  | 2023 | 82 | 71 | $54 \%$ | $46 \%$ |  |  |
| ALEVD | 2017 | 30 | 35 | $46 \%$ | $54 \%$ |  |  |
| ALEVE | 2023 | 2017 | 40 | 37 | $52 \%$ |  |  |
|  | 2023 | 29 | 36 | $28 \%$ | $48 \%$ |  |  |
|  |  |  | 43 | $40 \%$ | $72 \%$ |  |  |
|  |  |  |  |  | $60 \%$ |  |  |

Figure 4. 2017 v 2023 Academic Staff Headcount by Gender and Academic Level Continued
The proportion of females has grown at ALEVB (58\% to 61\%), ALEVC (51\% to 54\%), ALEVD (46\% to $52 \%$ ) and ALEVE ( $28 \%$ to $40 \%$ ). This bodes well for the pipeline to senior levels.

In STEM Disciplines (SENG and SSCI), there is a developing pipeline of females (Figure.5), noting a slight decrease at ALEVD. Representation of females however is still very low at ALEVC-ALEVE.

STEM academic staff by level and gender - (SENG and SSCI)


|  | Year | Females | Males |  | Females |  | Males |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALEVA | 2017 | 3 | 8 | $27 \%$ | $73 \%$ |  |  |
|  | 2023 | 6 | 7 | $46 \%$ | $54 \%$ |  |  |
| ALEVB | 2017 | 15 | 28 | $35 \%$ | $65 \%$ |  |  |
|  | 2023 | 22 | 24 | $48 \%$ | $52 \%$ |  |  |
| ALEVC | 2017 | 3 | 19 | $14 \%$ | $86 \%$ |  |  |
|  | 2023 | 10 | 23 | $30 \%$ | $70 \%$ |  |  |
| ALEVD | 2017 | 4 | 13 | $24 \%$ | $76 \%$ |  |  |
|  | 2023 | 2 | 15 | $12 \%$ | $88 \%$ |  |  |
| ALEVE | 2017 | 0 | 9 | $0 \%$ | $100 \%$ |  |  |
|  | 2023 | 2 | 14 | $12 \%$ | $88 \%$ |  |  |

Figure 5. 2017 v 2023 STEM Academic Staff Headcount by Gender and Academic Level

In +M disciplines (SMHS and SNM), the proportion of females declined slightly at ALEVA and ALEVB, but grew slightly in ALEVC, ALEVD and ALEVE. This continues to develop a pipeline, while retaining the females in senior levels at ALEVC/D (Figure.6/Table.11.).


Figure 6. Continued 2017 v 2023 [+M] Academic Staff Headcount by Gender and Academic Level

| Year |  | Females | Males | Females | Males |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALEVA | 2017 | 14 | 6 | $70 \%$ | $30 \%$ |
|  | 2023 | 20 | 11 | $65 \%$ | $35 \%$ |
| ALEVB | 2017 | 59 | 15 | $80 \%$ | $20 \%$ |
|  | 2023 | 71 | 25 | $74 \%$ | $26 \%$ |
| ALEVC | 2017 | 24 | 12 | $67 \%$ | $33 \%$ |
|  | 2023 | 23 | 8 | $74 \%$ | $26 \%$ |
| ALEVD | 2017 | 11 | 5 | $69 \%$ | $31 \%$ |
|  | 2023 | 11 | 4 | $73 \%$ | $27 \%$ |
| ALEVE | 2017 | 7 | 14 | $33 \%$ | $67 \%$ |
|  | 2023 | 12 | 13 | $48 \%$ | $52 \%$ |

Table 11. 2017 v 2023 [+M] Academic Staff Headcount by Gender and Academic Level
Data for SBL, SAH, SEDU and WAAPA shows the proportion of females grew in ALEVB from $53 \%$ to $61 \%$ and ALEVD from $47 \%$ to $58 \%$ developing the pipeline (Figure.7). The headcount of ALEVE females grew from 7 to 16 , with the proportion of females increasing from $35 \%$ to $47 \%$ because male ALEVE grew at a similar [13 to 18 ( $65 \%$ to $53 \%$ )].


Figure 7. 2017 v 2023 Non-STEMM Academic Staff Headcount by Gender and Academic Level

|  |  | Year | Females |  | Males |  | Females |  | Males |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ALEVA | 2017 | 30 | 19 | $61 \%$ | $39 \%$ |  |  |  |  |
|  | 2023 | 27 | 23 | $54 \%$ | $46 \%$ |  |  |  |  |
| ALEVB | 2017 | 66 | 58 | $53 \%$ | $47 \%$ |  |  |  |  |
|  | 2023 | 92 | 58 | $61 \%$ | $39 \%$ |  |  |  |  |
| ALEVC | 2017 | 52 | 46 | $53 \%$ | $47 \%$ |  |  |  |  |
|  | 2023 | 43 | 37 | $54 \%$ | $46 \%$ |  |  |  |  |
| ALEVD | 2017 | 15 | 17 | $47 \%$ | $53 \%$ |  |  |  |  |
| ALEVE | 2023 | 2017 | 7 | 17 | $58 \%$ |  |  |  |  |

Figure 7. 2017 v 2023 Non-STEMM Academic Staff Headcount by Gender and Academic Level
Information on our efforts to increase the progression of females in STEMM to ALEVC and above can be found in Cygnet \#2.
2) Increased pool of female research academics on the pathway to professorial roles

### 2.2. More females than males appointed via the Vice Chancellor's Research Fellowship Scheme

Because the initial approach to recruiting research professors through the VCPRF resulted in a maledominated series of appointments, when the VCRF was launched in 2019, a gendered lens was consciously applied.

Of the 12 academics recruited in total between 2019 and 2020 for the VCRF, eight females were hired

| VCRF recruitment - Year | Females | Males |
| :---: | :---: | :---: |
| 2019 | 0 | $2(100 \%)$ |
| 2020 | $8(80 \%)$ | $2(20 \%)$ |
| Total | $8(67 \%)$ | $4(33 \%)$ |

Table 12. VCRF recruitment rates across 2019 and 2020.
(67\%) and four men (33\%). Of these, three females were appointed in STEM disciplines (SSCI or SENG) and two females were appointed into +M disciplines (SNM or SMHS) (Table.12). Additionally, the $\operatorname{DVC}(\mathrm{R})$ provided an additional 3-year 'Strategic Research (SF) Fellowships’ scheme to appoint three "near-miss" high calibre applicants, all of which were females in STEMM.

Due to the global pandemic and its financial impacts, the recruitment campaign did not proceed over 2020-2022. It recommenced in 2023 with revised parameters for data capture given in the preliminary years, application and shortlisting data was not collected. Moving forward to ensure a multifaceted approach to analysing and dissecting data, the latest data sets include applicant, eligibility, shortlisting and interview rates.
$\square$

[^2]Of the 108 applicants, $80 \%$ of applicants were deemed eligible with no difference by gender (Table 13). [Redacted text]

## 3) Increased proportion of females being appointed through the Vice-Chancellor's Professorial Research Fellowship Scheme

In 2018-2019, six VCPRFs were appointed through this Scheme: five females and one male. The sixth appointee, the male, was ECU's first Aboriginal researcher appointed through this Scheme (Table.14). This was achieving our ASBAP Item to appoint more females than males.

For the 2018-2019 VCPRF campaign, for recruitment purposes, the Scheme was conducted in a different way to the previous 2015-2017 campaign. It was not opened for applicants in one big recruitment drive, but rather selected and targeted recruitment strategies were applied to focus on gender inequities. As such, no overarching application, shortlisting, or recruitment data was collected and consequently not reported on. In the future, ECU will look at the best ways to capture this data to ensure consistent reporting abilities.

| Gender | School |
| :---: | :---: |
| Female | School of Education |
| Female | School of Nursing and Midwifery |
| Female | School of Science |
| Female | School of Nursing and Midwifery |
| Female | School of Nursing and Midwifery |
| Male | WAAPA |

Table 14. New Vice-Chancellor Professorial Research Fellow appointments 2018-2019
As mentioned, due to the global pandemic and its financial impacts, the recruitment campaign did not proceed over 2020-2021. [Redacted text]

In 2022-2023, the VCPRF Scheme was reopened in the same recruitment strategy as 2018-2019, whereby ECU allowed Executive Deans to seek out applicants for their required areas or research focus. This was to target areas such as SENG, where there is a gap for female professors in the School. Also, there was not the same requirement as in 2018-2019 to only hire females and no males.

ECU hired three female professors and three male professors as new VCPRFs (Table.15). While it is pleasing to see a gender balanced cohort, there is still work to be done to reduce the risk of replicating existing gender inequities (for example, female professors recruited for female dominated schools). [Redacted text].

| Gender | School |
| :---: | :---: |
| Female | School of Arts and Humanities |
| Female | School of Nursing and Midwifery |
| Female | School of Education |
| Male | School of Business and Law |
| Male | School of Business and Law |
| Male | School of Science |

Table 15. New Vice-Chancellor Professorial Research Fellow appointments 2022-2023
Throughout ECU's VCPRF Scheme, a total of 30 professors have been appointed (11 females and 19 males). Since the 2018-2019 scheme ended, there has been eight females to seven males hired. The gender balance and representation are still very much a consideration and priority for ECU.

| Action 1.1 | Create formal data collection and reporting processes for the VCPRF and VCRF Scheme. |
| :--- | :--- |
| Action 2.1 | Creation of the Athena Swan Research Data Dashboard. |

## IMPACT

In alignment with the University's ongoing AS journey, ECU has implemented strategies to attract and appoint females into Professorial Research roles to grow female research leadership capacity.

## 1) Impact of the Vice-Chancellor's Research Fellowship Scheme on female research academics

As previously noted, in 2021, an internal review of both the Vice-Chancellor's Professorial Research Fellowship and Vice Chancellor's Research Fellowship Schemes was conducted and anonymised staff feedback was collated.

The VCRF respondents reported strong positively perceived career benefits from their appointments (Table 16). Due to the Scheme, appointees were able to increase their publications, grow their research track record, submit successful funding applications, and supervise HDR students.

| Female VCRF participants particularly noted: |  |
| :--- | :--- |
| Importance of mentors | "I am also very grateful to my mentor who has supported me and guided me to <br> grow and develop as an academic". <br> "Consultation and assistance from my VCRF research and supervision mentors <br> have greatly contributed to my research and career development". |
| [Quote redacted] |  |
| Access to research <br> facilities | [Quote redacted] |
| Opportunities for skills <br> development | They noted they were able to:  <br> Improve research and <br> teaching skills "I have been able to practice both independent and collaborative research." <br> "The ECU staff development services provided (through workshops, seminar, <br> and presentation) have helped me to develop my research and teaching <br> knowledge and skills." <br> Improve funding <br> applications "hrough research services and ECU/school support, I have been able to apply <br> for external research grants and improve my grant-writing skills." <br> Improve research profile "VC Research Fellowship Scheme is a golden opportunity to help early career <br> researchers to build their research profile and grow as an academic." <br> "The VCRF PhD scholarship has helped me to improve my supervision skills <br> and develop leadership skills." <br> Improve ability to <br> supervise HDR students <br> "ECU PSAP supervision program provided me the opportunity to have access to <br> an immense pool of supervision resources and valuable presentations by <br> experienced supervisors as well as the opportunity to practice and reflect on my <br> learnings." <br> vCRF research support as well as the generous school start-up research <br> support have helped me to develop my relevant research infrastructure within <br> the school and support my PhD student much better.  |

Table 16. Female participant feedback from Vice-Chancellor's Research Fellowship Scheme Internal Review 2021
These findings bode well for the 'trickle down' effect of the VCRF in cultivating a research pipeline, however it should be noted, there were some gaps persisting though in the assistance available:
[Quote redacted]

With the changes and updates that have been made to the VCRF through the 2021 review, the female experience of the recruitment process through the Scheme would have been a beneficial area of exploration for the University. However, the focus of the VCRF review didn't include specific recruitment questions. As a result, future steps will include the creation of formalised feedback and
mechanisms to ensure more targeted impact analysis of the Scheme (see Action Plan). As part of this, it will be important to regularly examine how a more gender-balanced research cohort (and professoriate) would directly benefit junior female researchers on their career journeys and if there is differential impact across all the schools.

## 2) Impact of the Vice-Chancellor's Professorial Research Fellowship Scheme on female professorial researchers

In 2021, an internal review of the Scheme was conducted and anonymised staff feedback from 23 participants ( 8 female and 15 male) was collated for thematic analysis. Insights reflected positive perceptions of how the initiative aligns to key ECU priorities in building research capacity (Figure.8).

> "Since being recruited to ECU, I have seen the VC Professorial Research Fellowship Scheme fulfil its goal of employing outstanding research leaders across a range of disciplines. During that time ECU has also moved to establish key research themes to guide future research planning, investment, and recruitment."
> "I think it's an absolute privilege to be in this VCPRF role. I completely support what ECU is doing to employ more women professors across the University."
[Quote redacted]
[within the context of a joint appointment with industry] "Working at [organisation] has allowed me solve challenges for industry and deliver science for societal benefit. My role at ECU has allowed me to establish a group that builds capacity."

Figure 8. Impact on the lived experience of the VCPRFs at ECU

Female participants noted positive experiences with the Scheme itself and actions in working towards a gender-balanced research professoriate (Figure.9).

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"...having a gender balanced professorial across the Uni is to be applauded. It's so important these days".
"This initiative has helped to increase the visibility of women in the School."
[Quote redacted]
"The culture of [my school] is fantastic. When I needed support, it was there - how can I fault it?"
```

Figure 9. Quotes from the Review of the VC PRF Scheme (female academics)
Participants who responded to the recruitment questions did not notice gender playing a role. Emphasis appeared to focus on the experience of the individual, including their own research agendas as reflected in Figure 10.

> "I don't really notice the gender in [my school] my school during my recruitment. [The recruitment] just happened and I was happy with the outcome obviously"
> "I don't think gender was part of the recruitment process for me. I was tapped on the shoulder by a senior colleague and already knew of people in the school."

Figure 10. Impact on the lived experience of the VCPRFs at ECU
In examining these responses, it would be beneficial to dissect feedback at the school level to identify disciplined based themes as next steps if all possible. With such small numbers of VCPRFs often respondents' feedback is identifiable and unable to be presented with further detail on participant demographics.

## FURTHER ACTION

| Reference | Rationale/ Evidence | Actions \& Outputs | Timeframe (start \& end | Person/Group responsible for implementing actior | Senior Leader accountable for action delivery | Desired Outcomes/ Targets/ Success Indicators |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | - Professorial Research Fellow Recruitment Campaign in 2018/2019 resulted in more females than men being hired, and this positively impacted on the GPG. <br> - Applications from females improved when there was a gendered lens on the Schemes. | Actions <br> 1.1 Create formal data collection and reporting processes for the VCPRF and VCRF Scheme. <br> 1.1.1 ODVC (Research) to track the gender balance of recruitment into the VCPRF Scheme and the VCRF Scheme. <br> 1.1.2 Increase regular reporting to Athena Swan Charter Committee, Research and Higher Degrees Committee and Equity and Inclusion committee. <br> Outputs <br> a) Improve tracking of staff gender and research profile through standardised reporting mechanisms. <br> b) Annual gender equality reporting for the $\operatorname{ODVC}(\mathrm{R})$ to inform targeted succession planning for aspiring female academics ALEVC onwards. <br> a) Consistent review through formalised and regular feedback mechanisms which ensure equity and inclusion initiatives are having a positive impact. | Q1, 2024 | - Office of the Deputy ViceChancellor (Research) <br> - Athena Swan Team | - Deputy ViceChancellor (Research) <br> - Deputy ViceChancellor (Regional Futures) | i. Improve accessible data on applications and appointment of VCPRF scheme. <br> ii. Increase female professorial numbers across disciplines, as well as the numbers of research-active Level B/C females to progress through promotion pipelines to more senior roles. <br> *Individual targets to be developed for each school depending on gender balance needs. <br> iii. Improved the gender balance of the ECU professorial research cohort. |
| 2. | - Evidence shows that if gender equity data is measured it can support the case for action by highlighting key issues, challenges and solutions to address these respectively. <br> - Studies have shown men often have higher research outputs than females and we need to | Actions <br> 2.1 Creation of the Athena Swan Research data Dashboard. <br> 2.1.1 AS Team to develop Research Dashboard <br> 2.1.2 AS to regularly report on gendered research data. <br> 2.2 Review outcomes of research data to further disaggregate by teaching, research and service roles. | Q4, 2024 | - Athena Swan Team <br> - Office of the Deputy ViceChancellor (Research) <br> - Research Services Research Analytics, | - Deputy ViceChancellor (Regional Futures) <br> - Deputy ViceChancellor (Research) | i. The current staff research outputs dashboard to have increased gender and intersectoral reporting capability by December 2024 <br> ii. $100 \%$ of leaders and managers trained on use of dashboard by Dec. 2025 |


| Reference | Rationale/ Evidence | Actions \& Outputs | Timeframe (start \& end | Person/Group responsible for implementing actior | Senior Leader accountable for action delivery | Desired Outcomes/ Targets/ Success Indicators |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | assess the realisation of this trend at ECU. <br> - Current absence of accessible and transparent data that reflects the gendered profile of research. <br> - Currently have a dashboard for individual schools/ADRs to interrogate, as can staff themselves. The standardised reporting for AS needs that is not yet functional. <br> - Tracking and monitoring of gender application and monitoring allows for better decision making. | Outputs <br> a) A dashboard that will provide a monitoring tool to assess our progress in addressing gender inequities and to provide early warning of slippage and gaps. <br> b) Having increased Athena Swan data would allow for a more robust review of current data. <br> c) The Athena Swan dashboard is used by managers to identify gender inequities within their own organisational unit profile and set appropriate targets and actions. <br> d) Improve tracking of staff gender and research profile through standardised reporting mechanisms. <br> e) Annual gender equality reporting for the $\operatorname{ODVC}(\mathrm{R})$ to inform targeted succession planning for aspiring female academics ALEVC onwards. <br> f) Consistent review through formalised and regular feedback mechanisms which ensure equity and inclusion initiatives are having a positive impact. |  | Systems and <br> Performance <br> Team |  |  |
| 3. <br> See SENG <br> Cygnet 3 for reference | - In October 2023, there are still no females to have been promoted in SENG. <br> - SENG need to hire senior females for role models with the idea of "you can't be what you can't see". | 3.1 Actively pursue recruitment for a female Professor in SENG who can provide an aspiration role model. | Q4, 2024 | - Executive Dean (Engineering) <br> - SENG Executive Team | - Executive Dean (Engineering) | i. Increased number of female academics in School of Engineering ( $\mathrm{n}=1$ or more female professors) |


[^0]:    ${ }^{1}$ Numbers and percentages may be slightly different from previous reporting due to Human Resources Services Centre (HRSC) personnel reconciliation.

[^1]:    ${ }^{2}$ other routes include via the Academic Promotions process, through an industry-funded chair, or recruitment for an Executive Dean position.
    ${ }^{3}$ https://intranet.ecu.edu.au/__data/assets/pdf_file/0011/740666/Guidelines-Direct-Appointments.pdf

[^2]:    **Eligibility to apply for the Scheme relates to relevant Australian working rights and having been either a) awarded a PhD degree on or before the application round closing date; or b) been awarded their PhD within the last ten years (taking into consideration career breaks). The PhD must be in the relevant recruitment area for which they are applying.

    1 - shortlist rate calculated as shortlisted/eligible (not shortlist/applications)
    2 - application success rate calculated as appointed/eligible (not appointed/applied)

