Committing to Research Excellence

Southern Cross University highly values research and acknowledges that the university's excellent research standing is due to the efforts of our researchers. The performance of research excellence is critical to the future of the university with strategies underway to support researcher development, talented researcher recruitment and highly effective research support. To achieve research excellence, it is critical that we develop an understanding of what constitutes excellence in our researchers and to provide them with means to achieve this. This research productive definition is part of a suite of initiatives that will foster and reward excellent research performance across the university. This definition focuses on quality over quantity, and guides researchers towards achieving excellence and impact. The metrics used in the new definition have been benchmarked against ERA2018 averages and other universities with similar workload ratios and aspirations, so that the expectations that we set for our researchers ensure they are competitive in their disciplines, nationally and internationally.

Research performance expectations are provided here, for any staff member with a research workload allocation. Depending upon research performance over the last 3 years staff will be allocated a research work load of between 30 to 70 per cent. These performance expectations will be used to guide and support academic career development while also aligning with the university's research plan and strategic plan. These expectations will form part of a holistic performance conversation between a staff member and their supervisor with consideration of opportunity, individual circumstances and relevant context.

Indicators

Indicators have been established to align with the SCU research plan, and to balance quality and quantity of research outputs. Expectations are adjusted for the level of appointment and the discipline, and have been benchmarked against other models from regional universities and universities with similar aspirations in order to achieve equity and transparency across the disciplines and faculties.

The indicators have been nuanced by discipline and will be averaged per year over the latest rolling three-year period. It is not expected that a staff member will exceed the expectations in all six indicators. Higher performance in one area may be used to offset lower or even no performance in another. Continuing staff above Level B will be expected to meet or exceed at least 3 indicators.

Standard indicators are:

1. Number of publications
2. Proportion of publications in top 25% (Quartile) outlets (Q1)
3. Higher education research data collection (HERDC) Income Received
4. Percentage of on-time Completions (OTC)
5. Number of Higher degree research (HDR) supervisions

Indicator for Level Ds and Es and all research focused academics:

6. Field Weighted Citation Index (FWCI)

Exemptions

Staff appointed as Teaching Focused are exempt from the application of these Guidelines.

Expectations

Achievement is measured over a rolling three-year period, allowing averaging of the categories of performance over time. Researcher achievement will be assessed relative to opportunity. A researcher who does not yet have a three-year research career, or who has had significant career breaks within the past three years (not limited to, but including personal or parental leave, SCU management responsibilities and breaks in industry) will be assessed pro-rata accordingly, as will academics on less than 1 FTE.

Expectation levels are shown in the appendix. These will be updated from time to time in line with revised benchmarking and university priorities. Standard Research Performance is for a full-time staff member with an average workload allocation of 30 per cent for research. If the staff member's research workload is higher or lower, the expectation levels will be apportioned for number of publications, HERDC income and other indicators. If staff have extended periods of scheduled or unscheduled leave, the expectation levels will be apportioned for number of publications, HERDC income and other indicators.

Standard expectations are the minimum expectations set to maintain the status of being "research active" and thus on a standard research workload of 30 per cent.

All researchers on a standard research workload (including Level A and B) who perform above expectations for HERDC income, supervision and on time completions may gain additional research workload, in consultation with the Dean and the DVCRAC.

Conversely, researchers on a research-intensive workload who achieve below expectations may have their research workload reduced. Researchers who take on extra research workload, such as additional HDR supervisions, may also have their research workload adjusted. ECRs at Level A and B who are exceeding indicators that are not required by this policy may also receive additional research workload.

Definitions of each metric are detailed below.

Disciplines have been grouped where comparable levels have been derived. These groups represent a similarity in benchmarked outcomes. Academic staff members can nominate the discipline in which these expectations are measured, but this must reflect where the majority of their research is published. Where publications are split between multiple disciplines, a level between those selected disciplines may be used with approval from their supervisor. Where a staff member has many multidisciplinary publications, expectations will be set by their Dean/Head of Work Unit in consultation with the DVCRAC.

Disciplines

Engineering	Faculty of Science and Engineering
IT	Faculty of Science and Engineering
Science	Faculty of Science and Engineering
Health	Faculty of Health
Social Work	Faculty of Health
Education	Faculty of Education
Law	Faculty of Business, Law and Arts
Commerce and Management	Faculty of Business, Law and Arts
Arts	Faculty of Business, Law and Arts
Indigenous Studies	GNIBI College of Indigenous Australian Peoples

Number of Publications

Total research publications as listed in the University's research system (IRMA). It is a staff member's responsibility to ensure that their IRMA record is up to date. In order to be counted in any year, publications must be verified by the ADR and entered into IRMA prior to any discussions of research productivity and workload.

The types of publications that may be included are reflective of discipline differences, but in most cases only research monographs, book chapters and refereed journal Works/Feature-length Documentaries/National and/or International exhibitions have a weighting of 5 x 1 point applied. Where appropriate, significant research reports for government or industry may be counted as non-traditional research outputs. A non-

traditional research output [NTRO] will be recognised where a 250- word ERA research statement associated with the output has been accepted by the SCU NTRO Committee (for Creative Works) or approved by the Faculty ADR (for research reports). Publication weightings are derived from ERA guidelines.

Top Quartile Publications

Percentage of publications in top quartile (25%) journals or other relevant outlets (including journals, book publishers and conferences as assessed by Scimago (https://www.scimagojr.com/)

HERDC Income

Average HERDC income received by SCU during the reference period for which the individual is a named contributor. This includes all HERDC categories (1-4). The HERDC research income categories are set out below.

Category 1: Australian Competitive Grants Scheme Category 2: Other Public Sector Research Income Category 3: Industry and Other Research Income

Category 4: Cooperative Research Centres Research Income.

HDR supervision

HDR supervisions and completions are counted for all named supervisors, for research Masters and doctoral students enrolled at SCU.

Percentage of on time completions

Number of HDR supervisions that are completed in accordance with the current definition of on time completion (OTC) in the Graduate School policy.

Field Weighted Citation

This metric indicates how the number of citations received by a publication compares with the average number of citations received by all other similar publications indexed in the Scopus database. A FWCI of 1.0 is equal to the world average for the same publication year, discipline and publication type. Above or below 1.0 means the selected publication or aggregate of publications are higher or lower than the world average.

Dashboard

A dashboard will be available to assist staff in calculating their current performance

against the expectations. The dashboard is a tool to guide discussion of research performance It does not determine research workload. When analysing performance and determining future research workload, the dashboard will be considered alongside any research plan and performance objectives set out in an individual Academic Performance Review Plan. Given that there will be anomalies with any data driven assessment, researchers can provide additional evidence to support their performance beyond that is captured in the dashboard.

Balance across Indicators

Points distribution at different appointment levels: The maximum points applied to each indicator are capped to encourage a balanced research contribution, thereby ensuring that an individual cannot obtain high points overall without contributing to multiple performance measures. This information will be automatically calculated and shown in the individual's Researcher Dashboard.

Points	Level C - E		Level B – A	
	Meeting required standard	Maximum caps	Meeting required standard	Maximum caps
FWCI	7	25		
Q1 %	8	25	13	35
No Pubs	5	25	8	35
Income	8	35	13	40
HDR #	2	10	1	10
OTC	5	15		
Total	35	100 cap	35	100 cap

Examples

Below are examples of staff who have met the standard expectations through balancing across the indicators, achieving higher in some and lower in others. Each example is a full-time Teaching & Research academic level D with a 30% research workload.

Academic 1 is in Health: Faculty of Health: This staff member has performed above the standard expectations in Field Weighted Citations (FWCI), HDR supervisions (HDR) and On-time completions (OTC) which has compensated for lower outcome in Number of publications (#docs), HERDC income ($'000) and top quartile publications (Q1).

See appendix 2 Balanced Indicator methodology and worked example

	FWCI	Q1	#docs.	$'000	HDR	OTC.	Points
Standard exp.	0.8	60%	1.67	$21	2	70%	
Actual outcomes	1.54	25%	1.33	0.0	5.67	100%	
Points achieved	12.55	3.33	3.99	0.00	6.89	15.0	41.76

Academic 2 is in Arts: Faculty of Business, Arts and Law: This staff member has performed above the standard expectations in HDR supervisions (HDR), Number of publications (#docs) and top quartile publications (Q1) however On-time completions (OTC), Field Weighted Citations (FWCI), and HERDC income ($'000) are lower than the standard expectations.

	FWCI	Q1.	# docs	$'000	HDR	OTC.	Points
Standard exp.	0.7	40%	1.67	$14	2	70%	
Actual outcomes	0.00	100 %	3.00	$ 1.6	4	67%	
Points achieved	0.00	25.0	10.3	0.95	4.66	4.79	45.71

Research Focused Academics

Research Focused Academics will normally have achieved and be expected to maintain a higher national and international research standing than those academics on a standard research workload. Percentage of research workload will be determined by performance against these indicators, but especially HERDC, supervisions and completions. As well as meeting the expectations outlined in this document, research focused academics will also be expected to:

be Chief Investigator on at least 50% of grant applications counted for HERDC;

participate in major research engagement activities detailed below; and

act as mentors for ECRs

Examples of Research Engagement

Forms of research engagement would include activities with government, community, not for profit organisations, industry and other end users.

Engagement activities can include any of the following:

- Journal editorship
- Chairing or convening conference proceedings
- Law reform submissions that are noted in the main body of the final Law Commission report
- Patents
- Submissions to government inquiries or Royal Commissions that are published or noted in the main body of the final government report
- Publication of National/State guidelines
- Publication of an external policy, or set of procedures or standards of practice with evidence of implementation
- Expert witnessing in court or in formal enquiries
- Leadership of CRC or CRC:P
- Organising and running externally-focused research and industry conferences
- Membership of panels, committees or boards of a professional organisation or government body, including the Australian Research Council or National Health and Medical Research Council
- Other activities as determined by the ADR in consultation with Deans/DVCRAC.

Major engagement in research management is an expectation of all research-intensive staff. To be regarded as a major form of engagement the activity must be substantial in scope, involve a high degree of complexity and be of national and/or international level significance. External evidence of involvement in the activity is necessary to claim for engagement activities.

Appendix 1- Standard and research-intensive expectation levels

Standard Research Expectation Levels – 30 %

Discipline	Level E						Level D						Level C					Level B and A			
	FWCI	Q1	No pubs	HERDC	HDR	OTC	FWCI	Q1	No pubs	HERDC	HDR	OTC	Q1	No pubs	HERDC	HDR	OTC	Q1	No pubs	HERDC	HDR
Engineering/IT	1	54%	5	50k	3	70%	0.8	50%	2.67	33k	2	70%	40%	1.67	17k	2	70%	33%	1	15k	1
Science	1	75%	5.5	100k	3	70%	0.8	65%	2	70k	2	70%	40%	1.67	35k	2	70%	33%	1	25k	1
Health	1	63%	4.66	32k	3	70%	0.8	60%	1.67	21k	2	70%	33%	1	11k	2	70%	33%	1		1
SocialWork /Economics	1	43%	2.5	38k	3	70%	0.6	40%	1.67	25k	2	70%	40%	1.33	12k	2	70%	20%	1	8k	1
Commerce Mgt	1	75%	2	12k	3	70%	0.8	50%	1.33	8k	2	70%	50%	1.33	4k	2	70%	33%	1		1
Education	1	50%	3	24k	3	70%	0.7	40%	1.67	16k	2	70%	33%	1.33	8k	2	70%	33%	1	4k	1
Law	1	30%	2.33	16k	3	70%	0.5	40%	1.67	11k	2	70%	25%	1.33	5k	2	70%	20%	1		1
Arts/Indigenous Studies	1	30%	2.33	21k	3	70%	0.7	40%	1.67	14k	2	70%	25%	1.33	7k	2	70%	33%	1		1

Research Intensive Expectation Levels 70-100 %

Discipline	Level E						Level D						Level C						Level B and A		
	FWCI	Q1	No pub	HERDC	HDR	OTC	FWCI	Q1	No pubs	HERDC	HDR	OTC	FWCI	Q1	No pub	HERDC	HDR	OTC	Q1	No pub	HERDC
Engineering/ IT	3	100%	12	180k	6	100%	2.4	100%	9.67	90k	5	100%	0.5	100%	6	45k	4	100%	100%	5	22k
Science	3	100%	11	620k	6	100%	2.4	100%	8.5	310k	5	100%	0.5	100%	4.67	160k	4	100%	100%	3.67	35k
Health	2.5	100%	7	315k	6	100%	2	100%	6	120k	5	100%	0.6	100%	4	78k	4	100%	100%	3	11k
SocialWork /Economics	2.4	100%	5	100k	6	100%	1.8	100%	4	50k	5	100%	0.5	100%	3	25k	4	100%	100%	3	12k
Commerce Mgt	3	100%	5	25k	6	100%	2.4	100%	3	12k	5	100%	0.5	100%	2	6k	4	100%	100%	2	3k
Education	2.7	100%	6	28k	6	100%	2.1	100%	4.67	14k	5	100%	0.5	100%	2.5	8k	4	100%	100%	2.5	8k
Law	2.1	100%	5	40k	6	100%	1.5	100%	4	20k	5	100%	0.4	100%	2	10k	4	100%	100%	2	5k
Arts/ Indigenous Studies	2.7	100%	5	110k	6	100%	2.1	100%	4	60k	5	100%	0.5	100%	2	30k	4	100%	100%	2	15k

Appendix 2- Balanced Indicator methodology and worked example

Methodology Used

The LINEST function is used to calculate the relationship between each of the variables (dependent and independent) using the least squares method. Outlined below are the steps employed to calculate the points and methodology employed for research productive.

Example

Faculty of Health = Discipline Health

Teaching & Research Academic level D

Summary of Worked example

	FWCI	Q1	# docs	$	HDR	OTC	
Standard exp.	0.8	60%	1.67	$21	2	70%	
Actual outcomes	1.54	25%	1.33	0	5.67	100%	
Points achieved	12.55	3.33	3.99	0	6.89	15	41.72 points

Note: For the purpose of the calculation Q1 and OTC percentages are calculated using 100 % = 1. All total points are capped as per the 'points max level' as per the definition.

Key Metrics	Information	FWCI	Q1	#docs	$	HDR	OTC	Data
	1. Discipline and multiplier values							
Expectation-Min	Discipline and level metric minimum.	0.8	0.6	1.67	21	2	0.7	35
Expectation-Max	The maximum value has been calculated at 4 times the minimum i.e. discipline metric. This maximum value is the highest value across the data set plus 10% to ensure all values on the line are within limits.	3.2	1	6.68	84	8	1	100
Multiplier for expected value	Multiplier used, this may change round to round pending data set. Q1 and OTC are % calculations and the maximum is 100%.	4	%	4	4	4	%	
	2. Minimum and maximum for each KPI indicators							
KPI_Min	Discipline and level metric minimum	0.8	0.6	1.67	21	2	0.7	X-Axis
KPI_Max	Discipline metric - Max KPI value	3.2	1	6.68	84	8	1	
Points Min Level C - E	Balanced indicator- Points balance minimum	7	8	5	8	2	5	Y Axis
Points Max Level C - E	Balanced indicators - Points balance maximum	25	25	25	35	10	15	
	3. Minimum and maximum for each Discipline metric							
Result_Min	Minimum and maxim value of discipline metric	0	0	0	0	0	0	X Axis
Result _ Max		0.8	0.6	1.67	21	2	0.7	
Points_Min	Minimum and maximum balanced indicators	0	0	0	0	0	0	Y Axis
Points_ Max		7	8	5	8	2	5	
	4. Expected value if below the line							
1. Expected		0.8	0.6	1.67	21	2	0.7	
Actual-Below points			*0.25*	*1.33*	*0*			
LINEST VALUES CALCULATION	LINEST(Points_MIN:Max,Result_Min:Max,TRUE,FALSE) LINEST LINEST(0:7,0:0.8,TRUE,FALSE)	8.75	13.33	2.99	0.38	1.00	7.14	SUB TOTAL
POINTS	LINEST * Actual points	0.00	**3.33**	**3.98**	0.00	0.00	0.00	7.32
	5. Expected value if above the line							

2. Expected		0.8	0.6	1.67	21	2	0.7	
Actual-Above points		*1.54*				*5.67*	*1*	
LINEST VALUES LINEST	LINEST(PointsMin LevelC-E:PointsMax Level C-E,KPI_min:KPI_Max,TRUE,FALSE)	7.50	42.50	3.99	0.43	1.33	33.33	
CALCULATION	LINEST(7:25,0.8:3.2,TRUE,FALSE)							
Difference	Actual-Above points - Expected	0.74	0	0	0	3.67	0.3	SUB TOTAL
POINTS	(LINEST*Difference) + Points Min Level C-E	**12.55**				**6.89**	**15.00**	34.44

6.Total Points		**41.76**

Process

1. From the discipline level matrix, the expectation maximum is derived. This figure is calculated by determining the highest number in the data set across all researchers and then adding 10 %. This ensures the line of best fit when calculating the points using Linest.

2. Table of the figures informs the metrics for discipline level metrics (KPI) minimum and maximin and the balanced indicators for meeting the required standard and maximum caps.

3. Table of the figures that inform the minimum and maximum value for the KPI indicators and the balanced indicators. This is required if outcome is below the expected outcome.

4. Points attained are BELOW the minimum requirement. Apply the LINEST calculation to determine the line of best fit, then multiply by the points. This amount is then added to the subtotal for below points.

5. Points attained are ABOVE the minimum requirement. Apply the LINEST calculation to determine the line of best fit. Calculate the difference between the points attained minus the expected KPI then multiply the LINEST * difference and then add the minimum balanced indicator points for the metric.

6. The points are then totaled for below and above KPI and then added together to determine the total KPI points. 35 points is the minimum value for research productive points, maximum is 100 points.

Appendix 3 - Glossary

DVCRAC	Deputy Vice Chancellor Research and Academic Capability
HERDC	Higher Education Research Data Collection
HDR	Higher Degree Research Student
OR	Office of Deputy Vice Chancellor of Research and Academic Capability
Academic Workload committee	AWC
FOR	Field of Research
Q1	Top 25 per cent quartile journals as ranked by SciMago
NTRO	Non-traditional Research Output