PROJECT

CREST



Faculty awards at UCCS: Moving toward more transparency and inclusivity in achievement recognition

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ABSTRACT

The Project CREST Team conducted an inventory of 10 years of campus awards and seed grants available to UCCS tenure-stream faculty and gathered available demographic data on past winners. Our team then evaluated the award nomination calls for their fairness, transparency, and inclusivity by utilizing an adapted coding rubric for equity-minded faculty evaluations (O'Meara, 2022). Results of the inventory and subsequent qualitative coding suggest past campus awards have been inequitably distributed among men- and women-identified faculty and that there is considerable room for improving both the award nomination calls and the strategies used in evaluation of nominees. Recommendations and templates are provided to help units improve their award documents and processes.

Suggested citation: Song, H., Poe, J., Daniels, E. A., Skop, E., Smith, J. L. & Mendez, S (2022). *Recommendations for Improving UCCS Campus Award Processes*. University of Colorado Colorado Springs.

Overview

Campus awards offer an opportunity to commend faculty for their accomplishments in teaching, research, and service to the university. Further, they serve as important indicators of excellence for retention, promotion, and tenure review as these awards are often aligned with Retention, Promotion, and Tenure criteria. Internal seed grants provide many faculty much needed support to launch or further a program of research or make innovative changes in their classrooms to support student success. As these grants and awards can be important markers in a faculty career (Gallus & Frey, 2017), it is vital to ensure the criteria and processes by which they are given are fair, transparent, and inclusive. Unfortunately, the practices in how these awards and grants are reviewed often include criteria that are vague and outdated and rely on unstandardized and unclear review procedures. This opens the door for unintended biases to creep into the review process and may lead to unequitable outcomes for women-identified and other minoritized faculty. In fact, previous research indicates that women-identified faculty often win fewer awards (Holmes et al., 2011; Meho, 2021) and, when they do win, these awards do not appear to translate to greater prestige or are otherwise undervalued (Butcher & Kersey, 2015; Ma, 2019). When it comes to promotion and tenure decisions, this undervaluing or lack of parity in awards presents a potential barrier that impacts the progress of women-identified and minority-identified faculty as they work towards the Full Professor rank. Indeed, at UCCS we see greater gender-parity among faculty at the Assistant and Associate ranks, yet the number of Full women professors remains lower than expected with no change over time (Figure 1). Our team set out to inventory the faculty awards on campus and conduct a systematic review of all associated documents pertaining to criteria and selection of winners to determine - and offer recommendations for enhancing – the inclusivity of existing criteria.

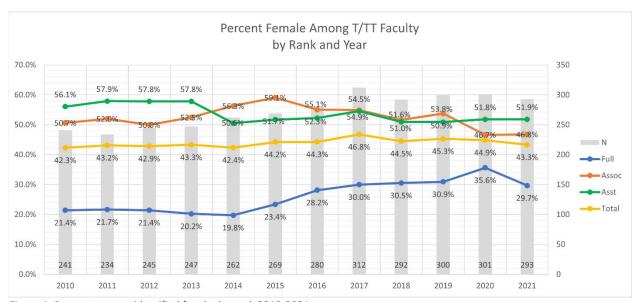


Figure 1. Percent women-identified faculty by rank 2010-2021

Method

Inventory of awards: We began our review of campus awards and grants by first conducting an inventory of all awards available to faculty on campus. This involved contacting known awards committee chairs and combing campus websites for award information, calls for applications, and reviewer instructions if available. This process yielded over 30 individual awards and seed grants; however, several were for IRC faculty and some staff positions. We chose to focus only on those awards and grants for tenure-track faculty, as these metrics play a role in the tenure and promotion process, but we hope our results will generalize to other award calls. The final pool of faculty campus awards include 3 for service, 5 for teaching, 6 for research, 8 seed grants for research, and one award (i.e., the Chancellor's Award) that relies on multiple categories of research, teaching, and service (n = 23 awards) as shown in Table 1. We invite any award calls we missed to be submitted HERE for review in a later report.

Table 1. Awards and Seed Grants Used for Coding

Table I. Awards an	d Seed Grants Used for Coding							
Teaching Awards								
	COE Outstanding Teaching Award							
	College of Nursing Teaching Award							
	EAS Teacher of the Year Award							
	LAS Outstanding Teacher Award							
	Faculty Assembly Outstanding Teacher Award							
Service Awards								
	COE Outstanding Service Award							
	College of Nursing Service Award							
	Faculty Assembly Service Award							
Research Awards								
	COE Outstanding Researcher Award							
	EAS Researcher of the Year Award							
	LAS Outstanding Researcher/Creative Works Award							
	College of Nursing Research Award							
	Faculty Award for Excellence in Research							
	University Outstanding Research Mentor Award							
Seed Grants								
	CRCW							
	Cybersecurity Seed Grant							
	Faculty Research Travel Award							
	FAWC Research ADVANCEment Grants							
	Rising Star Diversity Grant							
	GLINT Research Grant							
	Teaching Enhancement Grants							
	Faculty Assembly Women's Committee (FAWC) Mini Grant							
Other								
	Chancellor's Award							

Rubric for coding award criteria and evaluation of nominee materials. We developed a coding rubric adapted from the Audit Resources for Equity-Minded Reform of Faculty Evaluation Policies published by the American Council on Education in 2022 (see Table 2 for the rubric adaptation). Our adaptation of this audit is intended to stand alone as a tool for critically evaluating existing award criteria and processes as well as assessing the inclusivity, transparency, and fairness of the criteria and review procedures.

Table 2. CREST adapted equity-minded award criteria coding rubric

1 Transparency

- 1.1 Information related to faculty award evaluation is intentionally shared, accessible, and accurate.
- 1.2 The award review criteria are broad and embrace the interests and talents of faculty from multiple social groups and backgrounds.

2 Clarity

- 2.1 Information is provided in a way that is easily understood.
- 2.2 There is ambiguity that could invite bias, guessing, and misinterpretation.
- 2.3 The award/seed grant evaluation criteria are outdated.

3 Accountability

3.1 The review process is explained in a clear manner and there are responsible actors and steps identified.

4 Consistency

- 4.1 Essential parts of the award evaluation process are standardized and applied consistently so that when the same kind of activity is evaluated or procedure enacted, faculty can expect similar treatment.
- 4.2 There are informal processes or practices that reward certain types of activities that may give one group of potential awardees an advantage.

5 Context

5.1 The award criteria take into account new contexts and novel forms of excellence.

6 Credit

- 6.1 Award criteria specifically recognize mission-critical work (e.g., mentoring, institutional service, DEI).
- 6.2 Award evaluation policies provide a way to take into account past performance when it is important to do so.

7 Flexibility

7.1 Award evaluation policies are flexible enough to adapt to the new, different, and changing set of contexts shaping faculty careers and work.

8 Pandemic Impacts

- 8.1 The award evaluation criteria or policies take into account the long-term impacts of the pandemic, and its corresponding restrictions and disruptions on faculty work.
- 8.5 The award evaluation considers how caregiving demands amplified considerably during the pandemic both personally and professionally in terms of emotional labor and meeting student, staff, and colleague needs.

9 Holistic assessment

9.1 There is a holistic assessment of teaching/research/service (e.g., there is *not* an overreliance on FCQs/h-indices/committees).

10 Definition of Excellence by Rank

10.1 Policies include what it means to meet and/or exceed teaching/research/service criteria relevant to different appointment types and ranks.

Coding method. Two coders – a graduate research assistant and one of the Project CREST team members - independently reviewed and coded all 23 campus awards and seed grants (Table 1) aimed at

tenure-track faculty using the coding rubric (see Table 2). First, coders reviewed one award as practice and then compared their scores and discussed differences in coding. This was intended to help ensure adequate interrater reliability. The rubric includes 16 statements concerning the clarity, assessment, accountability, and consistency of the award call along with other important domains. Statements were scored from 1 – Strongly disagree to 5 – Strongly agree, with higher scores indicating greater inclusiveness (after reverse scoring of select statements). Average scores were taken for each domain using the score from each reviewer (see Table 3) and individual reviewer scores ranged from 1.44 to 4.50. Additionally, reviewer scores were averaged across all 10 domains for an overall score for each award. Interrater reliability was assessed using intraclass correlations (ICC; Table 3). Using often-cited ICC cutoffs reported by Cicchetti (1994), the domains of Clarity, Flexibility, and Definitions of Excellence by Rank showed poor interrater reliability (ICC < .40) while the domains of Accountability, Context, Pandemic Impacts, and Holistic Assessment showed fair interrater reliability (ICC between .40 and .59). Finally, the domains of Transparency, Consistency, and Credit showed good to excellent interrater reliability (ICC values > .60).

Table 3. Coding rubric domains with means, standard deviations, and Intra-class Correlations.

Domain	M (SD)	ICC
Transparency	3.26 (1.28)	.854
Clarity	3.61 (0.76)	.274
Accountability	2.85 (1.38)	.454
Consistency	2.48 (1.08)	.884
Context	3.24 (0.78)	.469
Credit	3.29 (0.90)	.617
Flexibility	3.02 (1.04)	.292
Pandemic Impacts	1.95 (0.91)	.458
Holistic assessment	2.89 (1.04)	.510
Definition of Excellence by Rank	2.04 (.95)	.268
Overall	2.93(.67)	.683

Results for analyses of award winners. Using a combination of institutional data, where available, and validation with publicly available data (e.g., websites showing pronoun use) we coded for the gender identity and racial/ethnic identity of the winners over the past decade, between 2011 and 2021. For comparison, we calculated the percentage of women and men-identified faculty over the same time period, as seen in Figure 2.

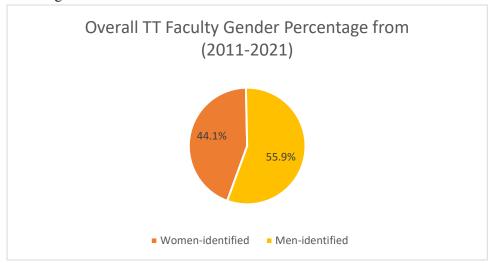


Figure 2. Average of faculty gender from 2011-2021.

Note. Only binary gender is reported due to limitations in available data.

Between 2011 and 2021, we were able to gather the winners of many campus awards and seed grants resulting in 230 faculty members who received recognition for their teaching, research, service or were given a seed grant. Of the known award winners between 2011 and 2021, 43.48% were women-identified and 56.52% were men-identified (see Figure 3). The ethnic/racial makeup of award winners was predominately white or unknown at 85.59% and BIPOC faculty made up the remaining 14.41% (see Figure 4). When looking at faculty gender and award type among the winners, we see that men-identified faculty won more teaching and research awards whereas women-identified faculty won slightly more service awards (Figure 5). Table 4 shows gender and ethnicity/race breakdown by awards.



Figure 3: Award winner by gender from 2011-2021

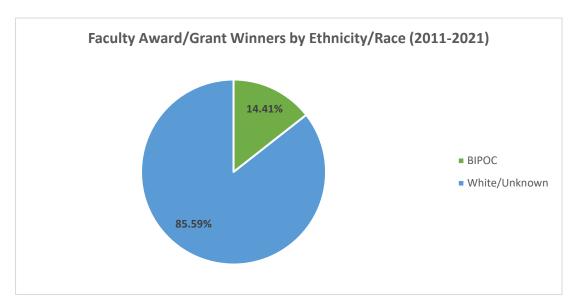
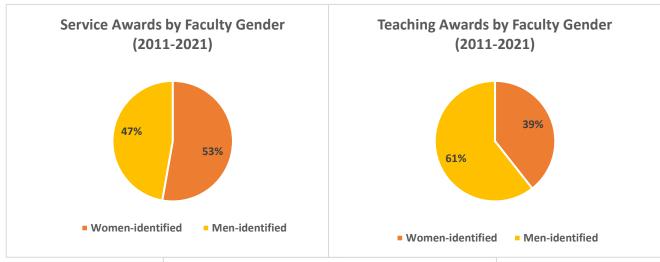


Figure 4: Faculty award winner ethnicity/race from 2011-2021.



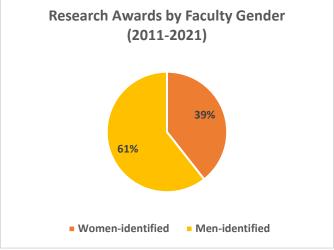


Figure 5: Faculty award winner gender by award type

Table 4. Gender and Ethnicity/Race Breakdown by Award

1 able 4. Gender and Ethinery/Race Breakdo	Male(%)	Female(%)	White(%)	BIPOC(%)
Teaching Awards				
COE Outstanding Teaching Award	28.6	71.4	85.7	14.3
College of Nursing Teaching Award	50.0	50.0	50.0	50.0
EAS Teacher of the Year Award	66.7	33.3	66.7	33.3
LAS Outstanding Teacher Award	20.0	80.0	70.0	30.0
Faculty Assembly Outstanding Teacher Award	36.4	63.6	100.0	0.0
Service Awards				
COE Outstanding Service Award	37.5	62.5	100.0	0.0
College of Nursing Service Award				
Faculty Assembly Service Award	27.3	72.7	100.0	0.0
Research Awards				
COE Outstanding Researcher Award	37.5	62.5	87.5	12.5
EAS Researcher of the Year Award	80.0	20.0	70.0	30.0
LAS Outstanding Researcher/Creative Works Award	60.0	40.0	90.0	10.0
College of Nursing Research Award	66.7	33.3	100.0	0.0
Faculty Award for Excellence in Research	72.7	27.3	81.8	18.2
University Outstanding Research Mentor Award	66.7	33.3	100.0	0.0
Seed Grants				
CRCW	41.2	58.8	74.5	25.5
FAWC Research ADVANCEment Grants	0.0	100.0	66.7	33.3

Results for award criteria and nomination review. The trained coders reviewed 23 awards and seed grants using the adapted coding rubric. Results of overall scores using the coding rubric indicate that award calls for seed grants were rated as somewhat more inclusive (M = 3.31, SD = 1.10) compared to awards in research (M = 2.74, SD = 1.09), teaching (M = 2.62, SD = 1.03), or service (M = 2.47, SD = 0.96). Overall, scores were only slightly over the midpoint of the scale (with the exception of the service award calls), suggesting considerable room for improvement in terms of inclusivity.

Only three awards/seed grants include explicit reviewer instructions and scoring rubrics for reviewers, and these same awards received the highest scores for inclusivity. In general, most of the award calls were vague in their criteria, providing no definition of excellence, and often used narrow indicators of teaching, research, or service excellence, such as student evaluations of teaching (i.e., FCQs) or publications in traditional outlets.

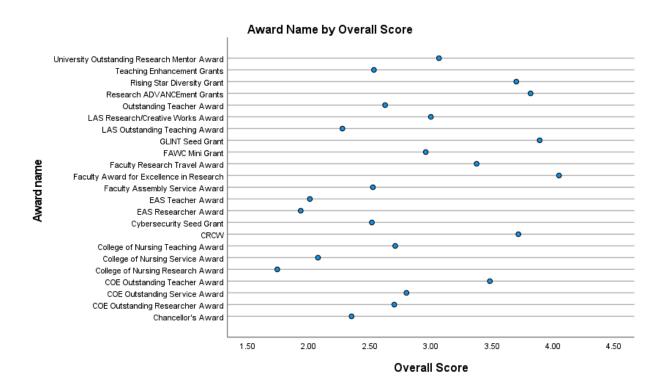


Figure 6: Scatterplot of campus awards with overall score using the Equity-minded Coding Rubric

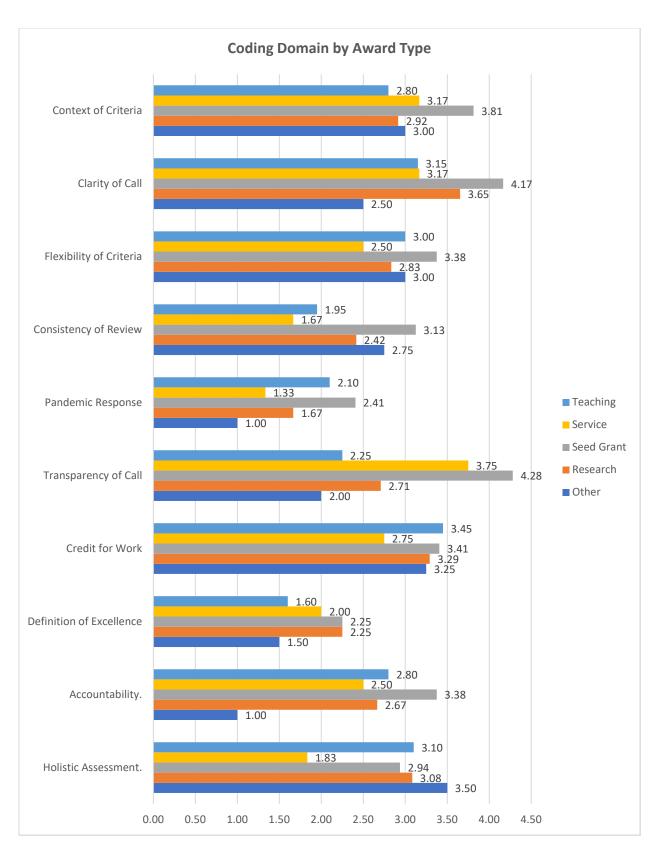


Figure 7: Scale scores on coding rubric by award type.

Discussion

The results from our inventory of winners from the previous 10 years of campus awards and internal grants show that the majority of these have gone to white and men-identified faculty. For example, though 77% of faculty at UCCS currently identity as white, people who identify as white win almost 86% of the awards. The only award type that women-identified faculty won more often were service awards – a metric that often goes underappreciated in promotion and tenure decisions. Though women-identified faculty make up less than half of the eligible tenure track faculty pool (44.1% during the same 2011-2021 time period), the rates at which they receive teaching awards, research awards, or internal seed grants still fall below what would be expected (39% of awardees) if the award evaluation and criteria were equitable.

To help support campus units in making these important updates to their award processes, the Project CREST Team created 1) a document summarizing best practices in award procedures, 2) a template of reviewer instructions to provide guidance for reviewers to evaluate how faculty have been successful in research, teaching, or service, and 3) a rubric reviewers can use to standardize their evaluations of faculty. Units may also assess their own award calls and procedures themselves using our Equity-Minded Campus Award Criteria Rubric which we used to evaluate the calls in this study.

Limitations

There were several limitations the project team faced in inventorying award winners as well as in evaluating award nomination calls and policies. One major limitation in inventorying the awards was the difficulty in gathering demographic data on the award winners, such as gender and race/ethnicity. We were unable to obtain many of these data from the Office of Institutional Research and instead relied on publicly available websites where pronoun use was noted. This substantially limited our ability to investigate intersectional identities and how awards/grants are impacted differentially based on multiple intersecting identities. Another limitation was the difficulty in gathering award nomination information. Much of this was in the form of brief emails, and nomination information was often from several years prior (e.g., "Please submit your nomination materials by March 31st, 2019"). It is unclear if such awards are still active or if there were updated nomination materials located on a different webpage. Other information we were not able to gather includes who nominated previous winners or if they were selfnominations. Knowing this would provide interesting insight into the rates of self-nomination or if faculty are particularly successful in winning depending on the characteristics of who nominates them. Similarly, we were not able to access who was nominated but did not win awards and grants in the past. Finally, we typically did not have access to information about the reviewers for different awards and grants. Knowing the characteristics of the reviewing committees could also help elucidate some of the disparities in awards and grants to faculty applicants. Finally, as our two coders were both white women-identified, in the future we can expand the trained coders to more diverse populations, including faculty, students, and staff in the future for more reliable assessment.

Conclusion

Campus awards and seed grants are important markers of faculty success at UCCS and can play a role in how RPT committees review faculty going up for promotion. Past research suggests that campus awards are not distributed equitably due to systemic implicit biases (e.g., Butcher & Kersey 2015; Holmes et al., 2011; Meho, 2021; Watson, 2021). Data from our own campus similarly reflect inequity. We must do better to ensure that faculty awards are fair, transparent, and account for the myriad ways our faculty contribute to their fields as well as to our campus and students. Revising award policies and procedures is a low-cost and accessible way units can step in to help mitigate the potential for biases and make award practices more equitable.

Implications and Recommendations

"Ten Ideas for Award Transformation and Equity"

- 1) **Transparency**: post the call for applications on a website and include information on review timeline and process. Provide a long lead time for the call for proposals so that applicants have plenty of time to submit materials. Also make evaluation criteria transparent to the applicant and provide instructions to reviewers (also made available to the nominees) to further elucidate how those teams will evaluate winners of these awards and grants. Track demographics of nominees over time.
- 2) Clarity: define subjective terms and be specific in required nomination materials, e.g., word limits, page counts, and letters of support details. Hold to those requirements and make sure everyone's packet is similar.
- 3) Accountability: identify reviewers (do they come from an established team? Previous winners?) and orient reviewers with information about the review process and mitigating bias in reviews. Those who lead campus award nomination processes are encouraged to use the Equity-Minded Campus Award Criteria Rubric which we used to evaluate the calls in this study to inform improvements to the award calls and nomination review processes on a regular basis (e.g., every three years). Rotate chairs and team members frequently. Reviewers should notify the award chair of any possible conflicts of interest *prior* to their review. Be sure to thank all nominees for their application materials and allow applicants to submit previous nomination materials again in the following year.
- 4) **Consistency**: apply criteria consistently over all groups of potential awardees. Our team provides a template for reviewers for a research award (see appendix) that can be adapted to other awards and seed-grants calls. This template is based on a peer review template developed by the University of Massachusetts ADVANCE Program.
- 5) Context: Update the evaluation criteria to better value and celebrate the diversity of contributions and faculty achievements that are necessary for the success and sustainability of the university. Consider novel forms of excellence and broader definitions of scholarship, teaching, and service that recognize alternate forms, and products of achievement. Allow faculty to use multiple ways to indicate excellence and do not limit evaluations to traditional metrics such as H-indices, publication counts, or FCQs.
- 6) Credit: identify DEI, institutional service, and past performance of the potential awardee. Make clear how these contributions should be assessed and weighed in award decisions. For example, DEI achievements may include program improvements, efforts to increase representation and success of faculty, staff, and students from marginalized backgrounds, promoting DEI in the community.
- 7) Flexibility: ensure long notification times to apply for awards and flexible policies for reviewers depending on faculty careers and work. This is necessary to support faculty career, productivity, job satisfaction, and advancement. Consider factors including family leave, childcare responsibilities, service load, and part-time appointments. In a comparative study evaluating burnout differences in the workforce, women experience more work-home conflicts than their

- male counterparts (Wagner et al., 2022). Use language supporting university policies regarding work-life balance in all areas of the award process.
- 8) Pandemic impacts: consider impacts of the COVID-19 pandemic on nominees and reviewers including caregiving demands, disruptions, and restrictions faculty experienced. Acknowledge that the pandemic's impact on faculty is/was uneven and not all faculty have/had access to needed resources including equipment, space, and high-speed internet. Be aware of the COVID impact on certain activities and adjust the criteria and reviewer instructions accordingly.
- 9) Holistic assessment: Track award nominations and winner data to identify any gaps that can inform award improvements. Consider a broad range of factors rather than disproportionately focusing on one factor. For example, for holistic teaching evaluations, factors including curriculum, classes, advising undergraduate and graduate students, mentoring, and development over time can be included. Apply a balanced approach to assess and give individual consideration to every applicant's achievement, competencies, and attributes. This could occur through a narrative approach that outlines the significance and nature of their work (e.g., interdisciplinary, community-based), as well as their contribution to the overall mission and goals of the department, college, and/or university.
- 10) **Definition of Excellence by Rank**: consider different factors between pre-tenured and tenured faculty in reviewing the award. Avoid the use a total count or frequency (e.g., number of students mentored) as this will disproportionally favor senior faculty. Instead take a proportion of time at UCCS in rank and the activity under review.

Appendix

Review of Nominations Template Example (Research Award)

Overview: Recognizing Excellence in Research, Scholarly, or Creative Work

Eligibility Criteria Met?

- 1. Be a faculty with rank of Assistant Professor or above
- 2. Be in at least their third year at UCCS
- 3. Have not previously received this award
- 4. People nominated in the previous year are automatically reconsidered as nominees for the next year, up to two years in a row. No new materials are required, though a nominee can update their materials if they wish. All nominations will be treated and assessed the same, whether or not materials are updated with the most recent submission.

Application Complete?

- 1. A nomination letter, up to one page double spaced. Self-nominations are allowed.
- 2. A narrative (double spaced, 1000 word maximum) of the candidate's research, scholarly, or creative activities and goals, using the provided criteria/rubric to organize the statement (written by the candidate)
- 3. CV
- 4. Supporting Letter(s) (maximum of 5 letters). Letters should address the originality of the candidate's work, and the holistic impact of the work both within and outside the field. At least one letter must be external to UCCS. Reviewers should link their letters to the award criteria/rubric provided
- 5. Up to three examples of research, scholarly, or creative work (e.g., publications, videos of exhibits, citations, etc.).

If yes to all these items, continue to score:

Getting Oriented*

Thank you for taking the time to review the nominations for this award. Your work in evaluating the submissions and selecting colleagues for recognition is important and familiar work for faculty. You may be less familiar with the research on peer reviewing, which has shown there are some common pitfalls in the process that lead to unintentional bias in the outcomes. Briefly, those pitfalls have to do with taking procedural shortcuts in peer review that lead reviewers to rely on intellectual shortcuts (e.g., biases) in our thinking (University of Massachusetts Amherst ADVANCE, "Equitable Peer Review Panel Templates").

Keep in mind: biases may appear in the very materials that you are asked to review as part of the nomination package. From difficulty in adhering to standard American English, to the content of the letters, to the types of metrics used to determine excellence (e.g., citation counts) there are several ways that bias may unintentionally get baked in. To overcome this, give yourself enough time to review. Research consistently shows that biases are most likely to occur when we are rushed. After you read the nominations consider going back over all the packets and reflect on the group as a whole. Just like grading papers, sometimes our criteria can shift as we see what is submitted. Make sure you go back and ask yourself if you were too hard on or too easy on nominees. Also be sure to use the nomination scoring/criteria/rubric as you evaluate each candidate.

Nomination Scoring

We will use a 9-point rating scale (1 = exceptional; 9 = poor) in whole numbers (no decimals) to determine the **Overall Research Impact** and **Three Criterion** scores for all applications. Scores of 1 or 9 should be used less frequently than the other scores. 5 is for a good medium-impact application and considered an average score.

Overall Research Impact or Criterion Strength	Score	Descriptor
	1	Exceptional
High	2	Outstanding
	3	Excellent
	4	Very Good
Medium	5	Good
	6	Satisfactory
	7	Fair
Low	8	Marginal
	9	Poor
	<u>l</u>	<u> </u>

You will score an application as presented in its entirety and may not modify your scores based on personal knowledge of the nominee. Please notify the award chair of any possible conflicts of interest *prior* to your review.

Consider the Three Criterion Strengths considering the number of years as a faculty member:

- Originality of the research or creative work
- Impact/contribution of the research
- Quality of the letters of support

Holistic Impression: You should give equal weight to the above criteria in assessing the comprehensive strength of the nomination package to derive an overall holistic score of the nominee. Your score should reflect the number of years a faculty member has served in academia – for example, using a proportion of contributions per year and <u>not</u> an overall count of contributions (which would disproportionally disadvantage early career faculty).

- You will also be asked to provide a very brief (~ 50 words) summary in support of your overall score.
- Your scoring will take place online, via a Qualtrics Review Portal.
- You will input the nominee's name in your review and repeat the reviewer form for each nominee.

Final Selection: The chair of the committee will tally the scores which are summed across reviewers for all nominees. The lowest score is selected as the winner. In the event of a numerical tie, the chair will call together the committee and share the reviewer summary comments. The award committee will then make the final selection.

^{*} Modified from <u>UMass ADVANCE</u> template for peer review

Suggested Award Tracking Sheets (Nominee, Committee, and Winners)

Award Data Collection Template: Nominee

Nominee Number	Na Last	me First	Nominee Department	Nominee Rank	Self- Nomination? (Yes/No)	Times Nominated?	Nominee Gender	Nominee Ethnicity/Race
1								
2								
3								
4								

Award Data Collection Template: Committee

Committee Number	e Name Last First		Committee Department	Committee Rank	Number of Years on Review Committee	Committee Gender	Committee Ethnicity/Race
1							
2							
3							
4							

Award Data Collection Template: Winners

Winner Number	Na: Last	 Winner Department	Winner Rank	Self-Nomination? (Yes/No)	Committee Gender	Committee Ethnicity/Race
1						
2						
3						
4						

Selected References

- Butcher, C. & Kersey, T., (2015). When Winning Is Really Losing: Teaching Awards and Women Political Science Faculty. *Faculty Publications*. 4096. https://digitalcommons.kennesaw.edu/facpubs/4096
- Cicchetti, D.V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*. 6(4):284–290.
- Gallus, J., & Frey, B. S. (2017). Awards as Strategic Signals. *Journal of Management Inquiry*, 26(1), 76–85. https://doi.org/10.1177/1056492616658127
- Holmes, M. A., Asher, P., Farrington, J., Fine, R., Leinen, M. S., & LeBoy, P. (2011). Does gender bias influence awards given by societies? *Eos, Transactions American Geophysical Union*, 92(47), 421–422. https://doi.org/10.1029/2011EO470002
- Ma, Y., Oliveira, D. F., Woodruff, T. K., & Uzzi, B. (2019). Women who win prizes get less money and prestige. *Nature* 565, 287–288
- Meho, L. I. (2021). The gender gap in highly prestigious international research awards, 2001–2020. *Quantitative Science Studies*, 2(3), 976-989.
- O'Meara, K. & Templeton, L. (2022). *Equity-minded reform of faculty evaluation policies: Audit Resource*. American Council on Education. Washington, D.C.
- Watson, C. (2021). Women less likely to win major research awards. *Nature*. https://doi.org/10.1038/d41586-021-02497-4