Undergraduate Student Constituency Report Virginia Tech Board of Visitors June 2, 2109 Presented by Rachel Iwicki, Undergraduate Student Representative

Good afternoon, Rector Treacy, President Sands, members of the Board of Visitors, and distinguished guests.

Blacksburg has quieted down since finals have finished and most students have left for the summer. The class of 2019 enjoyed a rainy commencement and are embarking on the next chapter of their lives. Of the members of the class of 2019 who have responded to Career & Professional Development's *First Destination Survey*, 53% reported that they will be working, 19% reported that they will be pursuing continuing education, and 23% reported that they are still looking for what they will be doing after graduation. Although the stresses of classwork and exams may be over for students, there is still a lot on our minds.

Title IX and Student Conduct procedures surrounding cases of sexual assault and violence continue to remain an important issue for students. On April 30, roughly 1,000 members of the community—including students, faculty, and staff—marched in the student-organized *Walk Out for Survivors of Sexual Assault at Virginia Tech.* Many students have cited wanting harsher sanctions on students found to have committed sexual assault and to continue to examine the processes related to this issue. While there is work being done around campus by administration, many students are unaware of these efforts or see them as siloed.

With the announcement of the class of 2023 being Virginia Tech's largest class yet, over enrollment quickly became one of if not the most talked about issues of the year. It is common knowledge that the university is planning on growing and for years, a large portion of students have not been in favor of the plan. Because of the knowledge of growth and the positive media surrounding the largest-yet class, many students believe the size was intentional. With many students having lived through the past two alternating years of over enrollment, they are not eager for the next cycle. There is stress over housing availability and costs, transit, parking, dining centers, the overall student experience, and the impact on the town of Blacksburg. Also, many current students have even expressed concerns with the new class not getting the typical and developmental "freshman experience" by being released from the first-year on-campus housing requirement.

Something that has become increasingly bothersome amongst students and underlies both issues is the university's communication and response to issues. According to many of the students I have spoken with, university responses to issues often feel like carefully crafted statements designed to offend the least amount of people as possible. They have cited a lack of the human element in such responses, which many feel contributes to continued and/or growth in frustration and dissatisfaction. On the over enrollment front, university media phrased the entering class as "15% higher than the original goal." Since exceeding goals is often positive, this

seemed to reinforce the common notion that this exceedingly large class size was intentional. Additionally, there was no media targeting current students and how their experience will be affected by the large enrollment. This has frustrated students who believe that the university does more posting about our Duck Pond otter and its new line of merchandise than addressing issues. Rather than feeling ignored by the lack of responses to stress factors and the positive spins on unintended results, students want honesty and transparency from the university, especially on the issues affecting our community.

Since this is my last constituent report, I just wanted to thank everyone for the incredible opportunity I had to serve as a representative this year. I am extremely humbled to have met and worked with so many amazing people and appreciate everyone's time and effort in improving and taking our university to the next level. I am also always happy to tell people that this position is not a formality and that I feel like the voice of students is genuinely heard and respected. While there's a million and half more things that I wish I could have done, I am proud of all the work accomplished this year and am excited for our incoming undergraduate representative, Madelynn Todd, to experience this role and serve our students. She is an incredible person and I am excited to watch her do amazing things and be a tremendous voice for student.

Virginia Tech Board of Visitors

Graduate Student Representative

Constituency Report #4

LORENZO "ZO" AMANI

Summer 2019



Good afternoon to all members of the Virginia Tech Board of Visitors, university leadership, and special guests here today. I'm honored to address this audience once again to deliver my final constituency report. As the Graduate Student representative, I have learned a lot from the faculty and staff at the Graduate school, graduate students and the Virginia Tech community. After a year of learning, I now feel very comfortable leading graduate students, but, unfortunately, my time is up. I will pass the torch to Ryan King who will contribute to the Board in his own unique way, while continuing the conversations that I have had with graduate students on our different campuses and sharing their unique stories with the Board.

In other news, the Graduate School recently celebrated 50 years of Virginia Tech graduate education in Northern Virginia. The celebration included tours of the Falls Church campus, including the Qualcomm Thinkabit lab, which is a phenomenal facility that exposes youth from all cultural and socioeconomic backgrounds to unique STEM experiences. While on the tour, I also learned about our Nuclear Science, Technology and Policy graduate certificate, which is a collaboration between STS and SPIA that brings engineers and policy makers together. This and several of our other interdisciplinary graduate programs collaborate with local, state, national, and international communities. There are several programs in the National Capital Region that are engaging the surrounding communities in many ways and there seems to be a premium placed on bringing knowledge to people. We currently have dynamic graduate programs in the northern Virginia area and I am hopeful that the Innovation Campus will exponentially build upon our legacy there.

Shifting gears, I would like to thank Dawn Jefferies and her team for diligently working to develop my vision of the a day-in-the-life video series that captured the unique stories a few graduate students. These videos show many elements of graduate students experiences including

work-life balance challenges, commitment to family life, Graduate School support, interesting research endeavors, participation in student organizations, and development of leadership skills. I hope that you all enjoyed the short videos and I hope that the visuals provide meaningful context to future conversations regarding support for graduate students.

Graduate students represent a distinct category of vital members to the Virginia Tech enterprise and, within this group, there are a plethora of diverse experiences and perspectives. Some graduate students are concerned about the increasing undergraduate enrollment and how it impacts their teaching loads. One student raised a valuable concern about the \$3.3 million allocated to defer student enrollment for the upcoming academic year. This student's main concern was that these funds should be used for current students. Other graduate students have expressed interest in the potential outcomes of the mental health task force report, and how it directly impacts current and future graduate student experiences. Also, in conversations with my constituents, we wondered why there are not any Virginia Tech Board members, other than the graduate representative, that have attended graduate school at Virginia Tech. We collectively thought about whether there should be at least one member on the Board who has experience as a graduate student at Virginia Tech and whether this would shift more focus and resources to graduate students.

As the Board engages future graduate representatives, I encourage you all to continue to consider the dynamic position of graduate students to ensure that our selection process yields the brightest leaders. As a reminder, most graduate students have graduate assistant responsibilities which require a minimum of 20 work hours per week, however, most of those responsibilities consume more than 20 hours of their time during any given week. Additionally, we have delicate relationships with our advisors. I hope the Board continues to look at the incentives and structure

of the position, so future representatives are dynamic thinkers and leaders.

In conclusion, I hope that my term was meaningful to my graduate student constituents. While serving as the Graduate Student representative on the Board of Visitors, I have enjoyed meeting many students, faculty, staff, and alumni and, although this past spring semester was very challenging for me, I can truly say that I have never been more-proud to be a Hokie. I have been at Virginia Tech's Blacksburg campus for almost 9 years: as an undergraduate student-athlete, staff, AP faculty member, and as a graduate student. Though my time here is coming to an end, I will continue to be a champion for Virginia Tech while working and finishing my PhD program in Washington, DC. Lastly, I would like to say thank you to Dean DePauw for her guidance and leadership throughout my term. She is truly a champion for graduate education at Virginia Tech. Thank you.

A Day in the Life of Three Graduate Students

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https://video.vt.edu/media/Meet+a+HokieA+Hazem+Sharaf/1_rqjxrmsn

https://video.vt.edu/media/Meet+a+HokieA+Andrea+Briceno/1_ce7n6k7b

Staff Senate Constituency Report Virginia Tech Board of Visitors June 2, 2019 Presented by Robert Sebek, Staff Senate President

Good afternoon Rector Treacy, members of the Board of Visitors, President Sands, administrators and distinguished guests. It is an honor to present to you updates from staff at Virginia Tech.

When I began taking on leadership roles within the Staff Senate, I has no idea I would be working on the issues that have taken up so much of my time these last two years. After speaking with staff across the campuses, holding long phone conversations, and reading numerous emails, it became clear to me that our lowest paid employees struggle to afford basic necessities, and that precipitates problems at work: tardiness from a lack of transportation, excessive absences from an inability to pay for healthcare, even with insurance, and limited advancement opportunities because they can't afford the education/training required to gain new skills.

After working closely with people across the university, Staff Senate has accomplished many things during my term of office. We are included on administrator search committees. We've expressed our concerns on transportation and parking, and we now help distribute information on affordable options for parking passes and alternate transportation means. Salaries for employees in pay bands one and two have been increased. A stipend has been added for employees making under \$35,500. Each of these changes will have a great impact on our many lower paid employees. But there is still more that can be done.

Raising the floor for our part-time employees and contractors to the \$12/hour our full-employees have received will be vital to recruiting and retaining staff in key areas overloaded by our large enrollments: dining, custodians, lab managers, and parking enforcement. The time to bring part-time pay scales in line with this minimum is now.

The new child care task force is off to a good start, and we will soon hear from local experts and gather data this fall through a third-party survey. But the need for affordable and flexible child care options is here now. Graduate students with families will struggle teaching labs well into the evening to accommodate the large freshman class. Dining employees who start well before dawn have few options when it comes to their children.

The hundreds of freshmen who will have to live off campus have already affected rent rates in town, along with older apartment complexes being replaced with luxury developments. The result is that affordable housing near campus is decreasing, pushing lower-paid employees farther and farther away. Money saved on rent is then spent on commuting and parking. I have applied to Blacksburg's housing advisory council to be able to continue to work on this issue after my term as Staff Senate president has ended.

Our employees want to advance themselves so they can move into better paying jobs, but the university makes it easier to have your Ph.D. paid for than a G.E.D. Policy restrictions and inflexible supervisors make taking advantage of the 6 credit hours a year benefit difficult for many employees who could earn an undergraduate degree. Other employees want to attend training to improve their work skills to be able to move up the career ladder, but are hampered by costs their departments are unable or unwilling to afford. We need to align policies to make it clear that Virginia Tech's values include bettering its employees, even when that bettering may mean the employee moves on to another job, inside or outside the university. That value for personal and professional development must be communicated to supervisors.

Virginia Tech can be a great place to work, but there is always room for improvement. Some improvements do not require spending additional money; it's only a matter of raising awareness of existing programs and services. As onboarding processes are revised, Human Resources should make an effort to highlight the same material shared with new employees with existing employees. The Staff Senate and other campus partners can also share this information to ensure all employees are aware of the benefits and services available to them.

As my term of office comes to an end this month, I am confident that the training and sharing of information with upcoming leaders within the Staff Senate means those who will serve after me will continue to fight for a better work place for our staff. Tammie Smith from Summer and Winter Sessions will take over as the new Staff Senate President and Staff Representative to the Board.

Respectfully submitted,

Robert Sebek President, Staff Senate

Faculty Senate President's Annual Report Presented to the Virginia Tech Board of Visitors June 2, 2019 John Ferris, Virginia Tech Faculty Senate President

Good afternoon Rector Treacy, President Sands, members of the Board, Provost Clarke, and all others gathered here today.

The Faculty Senate President is given the opportunity to prepare an annual report of the Faculty Senate's accomplishments and distribute it to the senate, faculty, administration, and Board of Visitors. Out of respect for faculty time, the scarcest academic resource, I will be brief in highlighting our accomplishments by thanking faculty members for their service and showing the many ways faculty senate champions the academic mission of the university.

First, the work done by all the senators on the University Commissions and Committees to provide a faculty voice in our system of governance.

Ryan Speer and the Faculty Senate Resolution Review Committee have demonstrated how faculty provide both meaningful and efficient input on academic resolutions.

Kira Dietz, Kiri Goldbeck-DeBose, and Anthony Wright de Hernandez are working with the Library Faculty Association and the Provost's office to revise the promotion process for faculty on Continued Appointment now that the Virginia Cooperative Extension no longer hires on that track. The process shows how collaboration with the Faculty Senate can be a significant part of responding to changes within the university while balancing the complex needs of numerous constituencies.

Emily Wilkinson Stallings led the Faculty Senate Committee on Assessment of Faculty Teaching and Jim Kuypers led the Faculty Senate Committee on Assessment of Faculty Research. Both of these committees -- chaired and staffed primarily by non-senators – demonstrate the commitment to service on the part of faculty and the role of senate leadership in focusing faculty on specific tasks.

Finally, our team of officers. Marie Paretti, our Secretary/Treasurer, concisely captured both the tone and pertinent details of our meetings and, more importantly, consistently provided insight into many of the topics we discussed. The wisdom of our past Faculty Senate Presidents – Hans Robinson and Monty Abbas -continued to guide me. Last, Bob Hicok, our Vice President, worked tirelessly behind the scenes to build trust and lay the groundwork for many of our initiatives, culminating in several proposed revisions to the faculty Handbook, not the least of which are improvements to our Promotion and Tenure process.

Looking ahead, the Faculty Senate will continue to strengthen our structure in order to support our initiatives and better serve our faculty and the university. We look forward to continuing our work on improved governance (e.g., through the President's Committee on Governance), proper use of faculty time (e.g., through the Organizational Excellence Task Force), and proper assessment of faculty achievements (e.g., through a revised promotion and tenure process and the assessment committees I mentioned earlier). As stewards of

Attachment II

the academy, faculty will continue to serve, protect and champion our academic mission. Together we have an unparalleled breadth and depth of expertise and are committed to working with the Board, the administration, staff and students to make the most of Virginia Tech's opportunities and challenges.

Respectfully submitted on behalf of the Faculty Senate,

John Ferris

VIRGINIA TECH FACULTY SENATE RESEARCH ASSESSMENT COMMITTEE'S JUNE 2019 REPORT ON FACULTY RESEARCH AND SALARY

June 1, 2019

EXECUTIVE SUMMARY

The Faculty Senate Research Assessment Committee (FSRAC) was formed to explore concerns regarding the evaluation of faculty research as well as salary concerns. Our report details the results of a university-wide survey drafted, distributed, and analyzed by FSRAC.

Key findings suggest that faculty produce a diverse set of **research outputs** and use a variety of researcher profile systems but often for different reasons. For instance, Elements/eFARs is primarily used because it is expected by departments, whereas ORCID iD and Google Scholar Profiles are considered more professionally/personally valuable.

The types of **impact metrics used and why** also show a disjunction between institutional and professional value. More traditional and quantitative metrics (e.g., number of publications) are used more for *institutional reasons* whereas less traditional and qualitative measures are used more for *personal reasons* (altmetrics, usage statistics, expert peer review, book reviews, etc.). Departments often assess research in ways that some faculty find vague or confusing; moreover, when metrics are required or expected, participants often distrust them and find them to be unreliable, especially when derived from college or university level expectations.

In terms of perceived **fairness of research assessments**, faculty overwhelmingly had less confidence in fairness of assessment at higher levels (e.g., college, university) than lower levels (e.g., department). Faculty decried the over-emphasis on quantitative indicators (e.g., grant dollars, number of publications) over qualitative measures (e.g., expert peer review), which offer more context about outputs and their impact. Moreover, faculty felt that current university measures favor STEM forms of, and expectations for, research evaluation and do not fairly recognize disciplinary differences in output and impact.

The committee noted with concern the discrepancy between **assigned time allocations versus time actually spent** on research, teaching, and service. Participants feel overburdened by service, teaching, research, and administrative demands; and most felt their research suffered due to time constraints. On average participants spent: 37.7% *more* time on service than expected, 6.5% *more* time on teaching than expected, 1.4% *more* time on other duties (e.g., administrative) than expected, and 2.5% *less* time on research than expected. Given this, demand on time has led to personal lives suffering, and this contributes in part to low faculty morale.

The PIBB's integration with research assessment raised large red flags with faculty. A majority expressed little to no familiarity with the new PIBB model; distrust in the model's ability to fairly and accurately measure output and impact; concern about the PIBB model negatively affecting academic freedom, research pursuits, and impactful research production, and ultimately disincentivizing transdisciplinary research while overemphasizing money.

Faculty salary considerations suggest a grotesquely chronic condition contributing greatly to low faculty morale and dissatisfaction. Data obtained from the 2017-18 Oklahoma State salary survey data, the *Chronicle of Higher Education*, and Virginia Tech's Office of Institutional

Research reveal that average salaries differ greatly when disciplines are factored in, and some are closer to achieving the 60th percentile target than others. Senior administrator salaries at Virginia Tech have reached the 50th percentile when compared to SCHEV peers while faculty salaries hover at the 35th percentile. Additionally, average faculty salaries at Virginia Tech are *lower* than average faculty salaries at other universities with the highest research activity (R1). Some faculty expressed a lack of awareness regarding the current and targeted (60th) salary percentiles in comparison to Virginia Tech's SCHEV designated peer institutions, and when informed expressed dismay to outrage; those participants aware of the percentiles expressed profound disappointment at the history of broken promises regarding salary increases; other concerns included problems with a lack of cost of living raises or raises based on inflation.

Based on the survey results, the FSRAC recommends the following actions.

Research assessments and workloads:

- a. The university should develop a brief, department level driven, university-wide, inclusive, and carefully-written responsible research assessment statement of principles to support and drive diverse research production;
- b. Each department should review its research assessment documents to ensure that standards for assessment are made clear in writing;
- c. Minimize college and university imposition on standards of assessment;
- d. Departments should not impose overly-burdensome and unrealistic expectations on faculty to bring in large grants;
- e. Each department should judge different research outputs differently (e.g., books take longer to produce and therefore should not be judged by a simplistic metric such as the "number of publications" metric, especially on a short timeline);
- f. The university should provide departments the resources to reduce teaching, service, and administrative expectations;
- g. Allow departments and perhaps colleges to opt out of eFAR where it is overly-burdensome and of lesser value, or provide administrative support;
- h. Consider "faculty research liaison" positions between faculty and administration.

2. PIBB integration with research assessment:

- a. PIBB should not be used to assess research this is a *strong* sentiment;
- b. If incorporated: i.) it must begin with educating faculty on the model; ii.) the preference is for including individual faculty considerations; iii.) all quantitative measures of productivity should be eschewed in favor of qualitative assessments; iv.) it should include an allowance for collaborative and transdisciplinary work

3. Faculty salaries:

- a. Faculty Senate must prioritize better educating faculty about actual and aspirational percentiles compared to SCHEV peers;
- b. The university should implement a plan *immediately* for raising salaries across the board to at least the 60th percentile with an aspirational 75th percentile goal;
- c. Once salary target percentile is achieved, move to salary increases based upon a cost of living model with additional and separate pool specifically for merit increases *in addition to the regular cost of living increases*.

Attachment II

1.0 INTRODUCTION

Over the past decade, Virginia Tech faculty have increasingly expressed concern regarding the evaluation of their research and scholarship. In addition to the changing nature of assessment, administrative calls for increased productivity in the absence of increased pay, and additional service burdens to accommodate administrative reporting mandates, there are perceived inconsistencies in how research and scholarship are evaluated within and between departments, colleges, and the university as a whole. As a result, the Faculty Senate of Virginia Tech created a committee on assessment of faculty research and scholarship in Fall, 2018 to explore these issues and make policy recommendations.

The Faculty Senate put out an initial call for committee volunteers. The goal was two representatives from each college to serve on the committee. All colleges supplied representatives to the committee with the exception of the Pamplin College of Business.

Taking the concerns of the Faculty Senate as the starting point, a survey draft was developed by the chair of the committee, Jim A. Kuypers, and committee members Rachel Miles, Virginia Pannabecker, and ex-officio members Nathaniel Porter and Amanda MacDonald. After the initial draft of the survey was completed, it was distributed to the entire committee. The inaugural meeting of the committee (see Appendix A for composition) was on January 30, 2019. At this meeting the initial draft of the faculty survey was reviewed and edited.

This survey's purpose was to determine:

- 1. The types of research outputs faculty produce at Virginia Tech;
- 2. The types of research assessment tools, research impact metrics, and researcher profiles used and why;
- 3. The awareness of the new Partnership for an Incentive Based Budget (PIBB) and its effect, real or perceived, on faculty research pursuits and research assessment practices;
- 4. Faculty attitudes towards the fairness of how their research is assessed on department, college/top-level, and university levels;
- 5. The percentage of time assigned to teaching, research, and service as well as the time actually spent on these activities;
- 6. How faculty perceive their salaries with respect to their peer institutions and university level aspirations;
- 7. Recommendations from the faculty for moving forward with research assessment and peer salary parity.

Following the meeting the survey was completed¹ and reviewed by IRB, announcements were made through VT News, *The Collegiate Times*, Canvas, The Faculty Senate to individual Senators, and to individual faculty through their College level Faculty Council (or similar organization) representative requesting faculty to complete the survey. The survey, conducted through Qualtrics, remained open for two weeks, and the results were reviewed and commented upon by the entire committee on April 15, 2019.

3

¹ See Appendix B for the survey questions and design.

What follows is the committee report in four main sections: University Level Results, Overall Policy Recommendations, College Level Summaries, and Appendices.

2.0 UNIVERSITY LEVEL RESULTS

This section consists of: basic data (2.1); research outputs produced and assessment measures used (2.2); comments on knowledge about and fairness of research assessments and workloads (2.3); PIBB integration with research assessment (2.4); and salary concerns (2.5).

2.1 Basic Data

Respondents were able to leave the survey at any time, and were prevented from taking it if they did not provide their consent. Overall, 501 faculty responded with 10.33% of all full-time faculty (471) completing the survey. *Approximately 20% of tenured and tenure-track faculty (302) responded.* University data on number of faculty was retrieved from the Office of Institutional Research² (OIR). Since respondents could choose whether or not to answer each question, the total response data for individual questions varies.

2.1.1 Faculty Type

This survey focused on faculty who produce research outputs at Virginia Tech, either as part of their official responsibilities in their faculty role or as their unofficial (not assigned or required) duties. Therefore, those who responded that they do not produce research outputs at Virginia Tech were prevented from completing the survey. As a result of this exclusion, the majority of participants were tenure-track or tenured faculty (Table 1).

Faculty type	Universi	ity Data	Surve	ey Data
	Count	Percentage	Count	Percentage
Tenure-track or Tenured	1504	32.99%	302	64.12%
Continued Appointment-track or Continued Appointment	34	0.75%	41*	8.70%
Research	705	15.46%	39	8.28%
Collegiate	45	0.99%	11	2.34%
Administrative and Professional Faculty	1854	40.65%	47	9.98%
Other (instructors, professors of practice, clinical faculty, etc.)	418	9.16%	31	6.58%
Subtotals	4560	100%	471	100%

Table 1. Survey participants' faculty types compared to university data

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² http://ir.vt.edu/

*Faculty were allowed to self-describe their faculty type, and since many faculty are currently transitioning to Continued Appointment-track (CA-track) within University Libraries, there seem to be more self-reported CA-track or CA faculty than indicated by OIR data.

2.1.2 Faculty Rank

Faculty Rank	Univers	University Data		ey Data
	Count	Percentage	Count	Percentage
Assistant Professor	420	8.46%	105	31.07%
Associate Professor	501	10.09%	125	36.98%
Professor	583	11.74%	81	23.96%
Distinguished Professor	Unavailable	N/A	5	1.48%
Professor Emeritus/Emerita	Unavailable	N/A	4	1.18%
Administrative/Professional Faculty (tenured, tenure-track, non-tenure-track)	1854	37.35%	N/A	N/A
Other (instructor, lecturer, postdoc, adjunct, visiting, clinical, collegiate, unspecified)	1606	32.36%	18*	5.33%
Subtotals	4964	100%	338	100%

Table 2. Survey participants' faculty ranks compared to university data

2.1.3 Top-level or College Affiliation

Top-level or College Affiliation	Universi	ity Data	Survey Data	
	Count	Percentage	Count	Percentage
College of Liberal Arts and Human Sciences	463	14.85%	122	30.58%
College of Agriculture and Life Sciences	670	21.49%	79	19.80%
College of Engineering	629	20.17%	42	10.53%
University Libraries	92	2.95%	33	8.27%
College of Science	435	13.95%	25	6.27%
College of Architecture and Urban Studies	165	5.29%	22	5.51%
Pamplin College of Business	186	5.97%	21	5.26%
College of Natural Resources and Environment	154	4.94%	12	3.01%

^{*}Those who selected "other" also specified their rank in the text-based response. 13 indicated they were some rank of instructor, 2 adjunct, 1 postdoc, and 2 preferred not to say.

Virginia Tech Carilion School of Medicine and Fralin Biomedical Research Institute; Virginia-Maryland College of Veterinary Medicine	317	10.17%	5	1.25%
Corps of Cadets; Honors College; Student Affairs	7*	0.22%	0	0%
Other	N/A	N/A	13	3.26%
Prefer not to answer	N/A	N/A	25	6.27%
Subtotals	3118	100%	399	100%

Table 3. Survey participants' top-level or college affiliation compared to university data *Data only available for Honors College

2.1.4 Race or Ethnicity

Race or Ethnicity	Univers	ity Data	Surve	ey Data
	Count	Percentage	Count	Percentage
African American or Black	210	4.70%	10	2.49%
White or Caucasian	3412	76.70%	294	73.32%
Hispanic or Latino/a/x	131	2.90%	14	3.49%
Asian or Asian American	356	8.00%	17	4.24%
American Indian or Alaskan Native; Native Hawaiian or other Pacific Islander; Middle Eastern or North African (MENA); Multiple races; other*	342	7.70%	11	2.74%
Prefer not to answer	N/A	N/A	55	13.72%
Subtotals		100%	401	100%

Table 4. Survey participants' race or ethnicity compared to university data

2.1.5 Gender

Gender	Univer	University Data		ey Data
	Count	Percentage	Count	Percentage
Male	2583	58.00%	195	50.39%
Female	1868	42.00%	150	38.76%
Prefer to self describe	N/A	N/A	3	0.78%
Prefer not to answer	N/A	N/A	39	10.08%
Subtotals	4451	100%	387	100%

^{*}For the purposes of protecting participants' identity, some race categories were combined.

Table 5. Survey participants' gender description compared to university data

2.1.6 Age

Age*	Survey Data		
	Count	Percentage	
18-24	2	0.52%	
25-34	54	13.95%	
35-44	120	31.01%	
45-54	81	20.93%	
55-64	62	16.02%	
65-74	22	5.68%	
Above 75	5	1.29%	
Prefer not to	41	10.59%	
answer			
Subtotals	387	100%	

Table 6. Survey participants' age

2.1.7 Professional Faculty Appointment(s) (PFA) Held - Number of Years

Number of Years Holding PFA(s)	PFA at Virginia Tech		Total PFA (including outside Virginia Tech)	
	Count	Percentage	Count	Percentage
Less than 1 year	24	6.20%	36	9.30%
1 to 5 years	114	29.46%	82	21.19%
6 to 10 years	65	16.80%	61	15.76%
11 to 20 years	101	26.10%	95	24.55%
21 to 30 years	24	6.20%	44	11.37%
More than 30 years	31	8.01%	41	10.59%
Prefer not to answer	28	7.24%	28	7.24%
Subtotals	387	100%	387	100%

Table 7. Survey participants' number of years of professional faculty appointment(s) held

2.2 Research Outputs and Measures of Assessment

In this section we detail faculty responses in four main areas: research outputs produced (2.2.1); researcher profile systems used and why (2.2.2); metrics used and why (2.2.3); other ways to assess research, scholarship, or creative activities (2.2.4); and metrics, performance management, and mental health (2.2.5).

^{*}Please note that university-wide data is not available on age.

2.2.1 Research outputs produced

A diverse selection of research outputs are produced at Virginia Tech, and faculty have ambitions to create more in the future. Figure 1 shows the percentage of respondents that produce or plan to produce: publications, presentations or lectures, creative works, grants, and patents. Table 8 breaks down the types of publications, presentations, and creative or artistic works *currently produced* into additional types with counts and percentages.

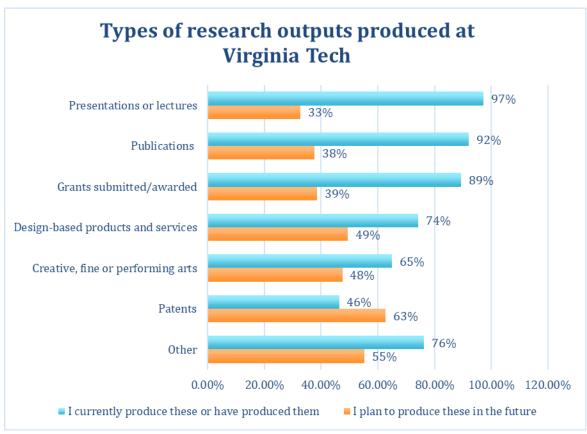


Figure 1. Research outputs produced and planned to be produced

RESEARCH PUBLICATIONS, PRESENTATIONS, AND CREATIVE OR ARTISTIC WORKS CURRENTLY PRODUCED					
PUBLICATIONS % of publications Co					
Articles or critical essays in peer-reviewed journals	16.76%	342			
Published conference papers, abstracts, or proceedings	13.87%	283			

Book chapters	12.50%	255
Non-peer-reviewed scholarship	8.14%	166
Published reviews of published works by others	6.86%	140
Newspaper or magazine articles	5.49%	112
Books authored	5.20%	106
Special journal issues edited	5.15%	105
Books edited	4.36%	89
Other published instructional materials	4.12%	84
Entries in reference works	3.87%	79
Data, software or digital code	3.63%	74
Digital scholarship not captured by other categories	3.04%	62
Prefaces, introductions, catalog statements, etc.	2.55%	52
Textbooks authored or edited	2.45%	50
Translations	1.08%	22
Other - please specify	0.93%	19
PRESENTATIONS	% of presentations	Count
Formal conference presentations	23.54%	371

Poster presentations	16.37%	258
Presentations at professional meetings	21.51%	339
Seminar presentations	17.70%	279
Panel presentations at events and/or conferences	18.72%	295
Other - please specify	2.16%	34
CREATIVE WORKS	% of creative works	Count
Performances or other live productions or readings	23.97%	29
Exhibitions	20.66%	25
Competitions and commissions, including juried shows	18.18%	22
Poems, plays, short stories, and creative essays	8.26%	10
Other - please specify	6.61%	8
Films or videos	5.79%	7
Catalogues, programs, or catalogue and program entries for performances, exhibitions or competitions	5.79%	7
Musical scores	4.13%	5
Books of fiction (e.g., novels, collections of essays, poems, stories, etc.)	3.31%	4

S	cripts or screenwriting	3.31%	4	

Table 8. Breakdown of the different types of publications, presentations, and creative or artistic works produced at Virginia Tech by survey respondents

2.2.2 Researcher profile systems used and why

By far, participants were most likely to use Google Scholar Profiles, ORCID iD, LinkedIn, Elements/EFARs system, and ResearchGate. When asked why they use these systems, Elements was primarily selected by participants because it is required, whereas Google Scholar, ORCID iD, and LinkedIn were more likely to be selected for personal or professional value (Figure 2).

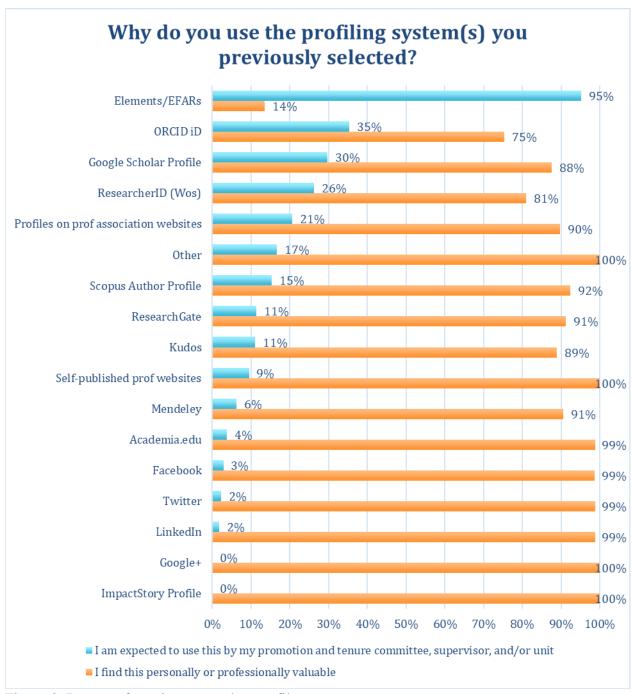


Figure 2. Reasons for using researcher profile systems

In addition, many comments emphasized that Elements/EFARs is primarily used because it is required for annual reporting and for promotion and tenure, but it does not "accurately capture everything." Figure 2 distinctly shows that faculty overwhelmingly feel that EFARs is not as professionally or personally valuable to them as numerous other profile systems. Example comments about EFARs included:

"We must report Efars each year. Mandatory"; "Institutional requirement"; "we are required to use Elements, other tools more useful overall"; "it's required, but is useful as a backup CV"; "it's a clunky and fairly useless system that I hate using."

Example comments about other profile systems included:

"ORCID provides an easy way to identify my work uniquely"; "It's not so much that I find any of these resources valuable, they just happen to have the most visibility. The information is saturating"; Required for publishing"; "Orcid required for submission of a manuscript to some journals. Google scholar used to keep track of co-authors' work also. Citations to some extent"; "ID websites like ORCID and Researcher ID are solely to track my publications with a single ID"

2.2.3 Metrics used and why

The five most selected research impact metrics were journal reputation, number of publications, citations to individual works, awards/recognitions/honors, and journal metrics (Table 9). Participants could select multiple metrics.

Five Most Relied upon Research Impact Metrics						
Research impact metric	Count	Percentage				
Journal reputation	282	75.81%				
Number of publications	277	74.46%				
Citations to individual works	237	63.71%				
Awards/Recognitions/Honors	214	57.53%				
Journal metrics (e.g., Journal Impact Factor)	210	56.45%				

Table 9. Number and percentage of participants that selected the five most popular metrics.

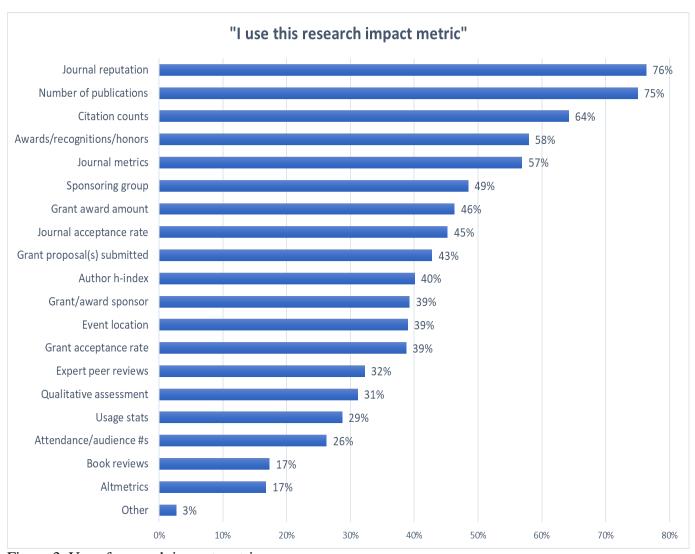


Figure 3. Use of research impact metrics

After participants selected the metrics they use (Figure 3), the next question asked them why they *primarily* use those metrics; they could select one of two options, or both: "I am expected to use this by my promotion and tenure committee, supervisor and/or unit" and/or "I find this personally or professionally valuable." Figure 4 (below) displays the two reasons they use each research impact metric and sorts it by percentage difference. On the far left side of the graph, it shows the largest percentage difference in which faculty were more likely to select, "I find this personally or professionally rewarding" (represented by the blue line), while the far right side of the graph shows the largest percentage difference in which faculty are more likely to select, "I am expected to use this by my promotion and tenure committee, supervisor, and/or unit" (represented by the orange line). The fewest percentage differences meet in the middle, with the author h-index and citation counts having the least amount of difference (i.e., participants likely selected both options when responding). For example, the majority of participants were more likely to select "I am expected to use this" for number of publications, journal metrics, and journal acceptance rate. In contrast, a large majority found the following metrics more useful for professional or personal reasons: attendance numbers, altmetrics, book reviews, usage statistics,

and expert peer reviews. Figure 3 and 4 help to clarify something important about respondents' behavior and preference towards metrics: in many instances, *they are more likely to use those metrics they are expected to use for formal evaluation purposes than those that they find professionally or personally valuable.*

A couple exceptions to this finding are awards/recognitions/honors and citation counts to individual works, which are both frequently used while also having significant personal or professional value to the respondent. In addition, journal reputation tends to be the most used metric while also having slightly more personal or professional value to participants. In some cases, participants commented on how journal reputation is strictly assessed by colleges or departments or how a journal ranking list is provided:

"They only use a very narrow journal list. There are only 4 journals that are valued in the department. My type of research can only reasonably be submitted to 2 of those 4. These journals govern all decisions about what research is valued, and matters, at both the department and College level. No other aspect of productivity (teaching, service, publications in other journals or outlets) is considered to have impact that is important. Neither # of citations for work published or journal impact factor anywhere beyond those 4 journals matters. If research is not published in those 4 journals, it is assessed as having zero impact."

In other cases, participants explained that they are aware of the journals in their field with renowned reputations yet are expected to submit elsewhere due to departmental expectations:

"It has radically changed how I think about what journals to send my publications to, because the department uses impact factor to determine what they think is a good journal. This is an incomplete metric and some really good journals don't qualify as good journal in the eyes of the department. Thus I find myself sending paper to what I and the community around me considers as worse journals, just because their impact factor is for some reason or another high."

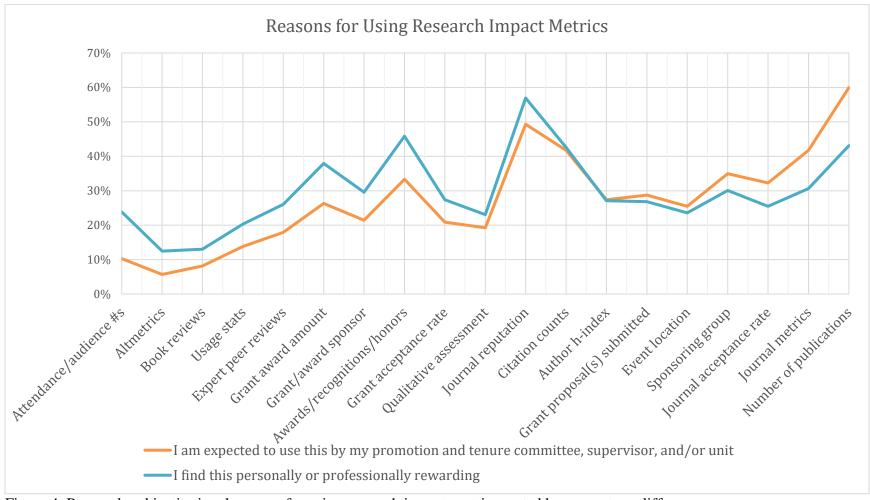


Figure 4. Personal and institutional reasons for using research impact metrics sorted by percentage differences.

Qualitative or narrative assessment had fewer responses (n=115 or 31.17%; Figure 3) than some of the more traditional measures, and a slightly higher percentage of participants (n=87 or 35.95%) indicated that they want to learn more about it in another question about services, instruction, and workshops (Figure 5). Participants were most interested in learning more about promoting their research (60.74%), which could indicate the growing pressure to perform in an increasingly competitive academic culture.



Figure 5. Interest in workshops, instruction, and educational materials

The participants' responses from questions about research impact metrics suggest that there are certain metrics that are considered more valuable to faculty than others while there are other metrics that are primarily used to comply with expectations and requirements for formal evaluation purposes. In particular, the number of publications and journal metrics are less likely to have professional or personal value to faculty; these two metrics had the highest percentages towards the "expectation" side versus the "preference" side. In contrast, attendance numbers, altmetrics, and usage statistics are more likely to have professional or personal value. Of note is that these results are mirror opposite to what PIBB is likely to focus upon according to our committee's collective knowledge on this subject.

Recent research⁴ is showing that traditional research impact metrics, such as the Journal Impact Factor, are more likely to be used for the purposes of tenure and promotion decisions than used solely for publishing decisions (i.e., decisions about where to publish, without the pressures or expectations of tenure and promotion). It should be noted, however, that if departments or promotion and tenure committees begin relying on alternative metrics, for example, it would be expected that the pressures to increase an Altmetric score would increase, which might lead to manipulation of that metric by asking colleagues to tweet out and blog about research articles to increase the score. Any metric can be manipulated, and it is generally accepted among experts in

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³ https://www.provost.vt.edu/initiative presentations.html

⁴ https://doi.org/10.7710/2162-3309.2212

research assessment that metrics will be manipulated when there is considerable pressure to perform well according to a singular metric. Currently, a phenomenon known as "citation cartels" has arisen out of the hyper-competitiveness to increase the impact of scientific articles through citation counts. Citation counts can, of course, still be a reliable metric to measure the impact of individual research outputs, but most experts agree that like any metric, they should be used responsibly and in conjunction with other measures, such as expert peer review.

2.2.4 Other ways to assess research, scholarship, or creative activities (text-based response)

When asked to describe how their departments assess the impact of research and other forms of output, participants' qualitative responses centered on two primary themes: 1) metrics are vague or unknown, and 2) current metrics produce unreliable assessments and are generally mistrusted by faculty.

First, a large number of participants emphasized uncertainty as to how their research and other forms of output are assessed primarily because these measures are unknown or unclear. Although a clear minority, it is noteworthy that several participants boldly declared they had no knowledge of how their work is evaluated by their departments, offering statements such as "No idea how my department chair assesses my work" and "it is a mystery." One participant simply quipped, "Good question!" Others claimed that they are unfamiliar with the assessment process because the department has not shared this information with them. Adding to this concern is that other participants stated that, "The departmental expectations are vague," "There are no quantities or descriptions prescribed for impact, etc." and "Never been made clear by local division or those higher up." One individual recounted that, "The department had me submit the online review and a colleague observed my teaching once." Alarmingly, some participants even noted that this ambiguity extended beyond assessment practices into research expectations for promotion and tenure. For instance, one individual explained that "There are no clear expectations set out by my tenure committee."

Second, several individuals mistrust and doubt the reliability of the departmental research assessment process. Specifically, participants criticized an overreliance on quantitative measures, lamenting that current assessment metrics underrepresent the level or quality of output produced by some faculty members. One individual explained, "My department is very superficial—it chooses to use citation counts, research expenditures, and research proposals. These are easily quantified. However, the true impact is not easily measured." Other comments included "The word count on publications is used by the department, which is a misguided assessment measure" and "My department does this poorly. All they do is count publications of largely incremental publications of widely accepted research." These types of comments parallel Goodhart's law, summarized best by Marilyn Strathern: "When a measure becomes a target, it ceases to be a good measure." Furthermore, the author and historian Jerry Z. Muller emphasizes these points in his book, *The Tyranny of Metrics*⁷:

• "Once we become fixated on measurement, we easily slip into believing that more is better" (p. 61);

⁵ https://blog.frontiersin.org/2017/01/03/citations-cartels-an-emerging-problem-in-scientific-publishing/

⁶ https://thebibliomagician.wordpress.com/2018/01/19/theres-no-such-thing-as-a-bad-metric/

⁷ https://www-jstor-org.ezproxy.lib.vt.edu/stable/j.ctvc77h85

- When faculty are judged by number of publications, "the incentive is to produce *more* publications, rather than *better* ones" (p. 79);
- "Evaluation solely by measured performance leads to a bias toward short-term publication rather than long-term research capacity" (p. 79).

Similarly, and distinctly worthy of note, other participants suggested that current evaluation methods privilege certain forms of output at the expense of others. One participant offered, "My department is biased toward journal articles. Books take longer but the department expects something each year to be published." Department dispositions may also limit the outlets available for publication. For instance, one individual explained, "They only use a very narrow journal list. If research is not published in those journals, it is assessed as having zero impact." As a result, some departments seemingly undervalue less common but still prominent and impactful forms of research. One individual commented, "I believe reports should carry more weight. Some of my reports are highly cited and have shaped policy at the federal level. Yet these provide little recognition in the academic environment."

For some faculty members, departmental assessment practices can have the potential to produce adverse effects. One individual outlined this concern in detail: "It has radically changed how I think about what journals to send my publications to, because the department uses impact factor to determine what they think is a good journal. This is an incomplete metric and some really good journals don't qualify as good journal[s] in the eyes of the department. Thus I find myself sending paper[s] to what I and the community around me considers as worse journals, just because their impact factor is for some reason or another high." This comment resonates with the data reported in the previous subsection, 2.2.3 Metrics used and why, in which the majority of participants found that the journal reputation was professionally or personally valuable to them but that their departments and/or promotion and tenure committees did not expect this type of metric to be reported (Figure 3). Journal reputation, after all, is more nuanced and based on expert opinions in the field rather than based on a quantitative metric such as the Journal Impact Factor (JIF), which does not normalize across disciplines.

In addition to shaping faculty members' research and publication plans, current forms of research assessment have also produced cynicism among a small minority of faculty. Some bemoaned the priorities of their departments ("Three most important factors are dollars, dollars and dollars."). Others deplored the perceived favoritism in the process. One individual expressed that "Department used heavy doses of whimsy and personal friendships plus heaping servings of jealousy." Likewise, another participant proclaimed, "The department relies heavily on politics and cronyism."

All of these comments and sentiment reflect the participants' attitude towards integrating the PIBB with the production of research outputs. *See Section 2.4 PIBB Integration with Research*.

2.2.5 Metrics, performance management, and mental health

Finally, and perhaps most importantly, mental health issues among academic faculty and staff have become a rapidly growing concern in higher education, and performance management and

metrics have been cited as one of the major contributing factors to this crisis. A new report⁸ produced by the Higher Education Policy Institute in the UK shows significant increase in demand for mental health support among higher education staff. The report cites the following evidence:

- Higher education has been described as an "anxiety machine." The report identifies the following causes of poor mental health in higher education institutions:
 - Excessive workloads and workload models which frequently under-count time necessary for fulfilling tasks, and many tasks prove invisible to the workload assessors.
 - O Audit and metrics dominate the working lives of academics. These are driven by the need to comply with external nationwide audits, such as the Research Excellence Framework and the Teaching Excellence Framework, but they have also been repurposed as instruments of performance management.
 - o Many academics exist on a succession of precarious contracts which do not allow for career planning or advancement.
 - o Performance management in universities is linked *to short-term outcomes and expectations* which are often unattainable for many.

In at least one instance,⁹ a faculty member committed suicide over the intense pressures to perform according to specific metric requirements (a grant income target) at his institution, and this evaluation process was technically only at an informal stage, which demonstrates the severe gravity of requiring or expecting such specific metric targets.

2.3 Fairness of Research Assessments and Workloads

We present faculty comments here in four general sections: fairness of assessment (2.3.1); concerns with current forms of research assessment (2.3.2); respecting disciplinary differences (2.3.3); and assigned versus real time devoted to research, teaching, and service (2.3.4).

2.3.1 Fairness of assessment

In general, the confidence in how each level (department, college, university) assesses faculty research decreases as the level increases. Part of this stems from the university focus on easily quantified elements and the amount of dollars research generates. These foci inordinately privilege some types of research over others, thus creating hierarchies of research value instead of an inclusive university environment that values all research and disciplinary differences.

⁸ Summary of report: https://www.hepi.ac.uk/2019/05/23/new-report-shows-big-increase-in-demand-for-mental-health-support-among-higher-education-staff/ Full report: https://www.hepi.ac.uk/wp-content/uploads/2019/05/HEPI-Pressure-Vessels-Occasional-Paper-20.pdf

⁹ https://www.timeshighereducation.com/news/imperial-college-professor-stefan-grimm-was-given-grant-income-target/2017369.article

Perceived Fairness of Research Assessment	Dept	College or Admin Unit	University
Strongly Agree	21%	12%	11%
Somewhat Agree	30%	30%	23%
Slightly Agree	16%	21%	20%
Slightly Disagree	10%	14%	17%
Somewhat Disagree	15%	13%	17%
Strongly Disagree	8%	10%	12%

Table 10. Perceived fairness of research assessment at the department, college, and university levels, graded on a Likert scale

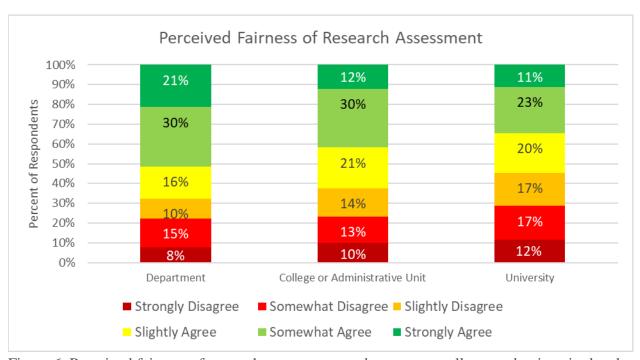


Figure 6. Perceived fairness of research assessment on department, college, and university levels.

2.3.2 Concerns with current forms of research assessment

Reflecting previous comments, participants expressed that current forms of research assessment overemphasize quantitative indicators and often neglect qualitative measures, which can offer

more context about the output and its impact. One individual elaborated, "The main problem is that assessment is mainly based on numbers of publications without much honest consideration of quality of publications, relative difficulty of performing research, and relative difficulty of obtaining funding." Similarly, another pleaded, "Stop the counting! It is misleading, does not value creativity, and solidifies an already caustic, calcified environment based more upon power than true scholarship."

As a result of the current assessment format and the growing inclusion of PIBB in university decision making, some participants feel the process undervalues their research and undermines their contributions to the university: "If you are not central to the new initiatives, even if you are on the frontiers of your discipline, the implicit message from the university is that your work is not valued and will not be supported." Finally, other individuals added that current evaluation forms fail to account for other responsibilities that may pull faculty away from research. One individual summed up these overarching problems: "Are long-term, high value projects discouraged under the pressure of frequent, measurable activity? Are models from the sciences, such as regular competition for grants and frequently publication from collaborative lab spaces rather than slower publication from individual work, unfairly applied to the humanities? How much time and effort does assessment take away from research?" Others noted that the FAR format as presently constituted, leads to short term publication gains instead of encouraging long-term, high impact projects. Coupled with the PIBB, this situation could readily worsen.

2.3.3 Respecting disciplinary differences

Many participants argued that research assessment fails to recognize disciplinary differences in output. Often, some participants argued, the current form tends to reflect STEM forms of evaluation that does not necessarily transfer well to other areas. Comments on this concern included "I am a social scientist, and it seems like research assessment is based on a STEM science standard," and "There is an overreliance on money and privileging of indices that are, at best, relevant for only some (primarily STEM) disciplines." Other individuals suggested that the lack of diversity in research assessment and a general unfamiliarity with standards in certain disciplines can be detrimental to faculty members, particularly when evaluated at the college and university levels: "The college has its own standards for judging us for P&T. However, they're not familiar with what we do [at our department level]they aren't in a place to set those standards."

Numerous participants argued that different forms of research require different timelines, making it difficult to compare the output of one faculty member to the output of another faculty member. For example, "The paradigms are distinct across disciplines and colleges. In this case, fairness does not mean equal output by faculty no matter the discipline. In the time it takes to craft a quality journal article in the humanities and social sciences, someone in the natural sciences can crank out several co-authored pieces." Some of our committee members noted that quality journal work in the humanities can proceed at an even slower pace than in the social sciences. Other participants suggested that the current assessment process is too short-sighted for certain forms of output. Specifically, these individuals noted that some faculty members have larger gaps of time in between their publications because of the nature of their work, and the current model fails to account for this difference. For instance, one individual offered, "My concern is

not about how the university measures my research output when a book is published, but how the college and university measures/recognizes research activity in the years between book publication."

2.3.4 Assigned time versus actual time on research, teaching, and service

Participants were asked to provide the official percentages of their time assigned to the categories of research, teaching, and service. They were then asked to assign the percentages of their work time they felt they actually spent on each category.

When asked to offer feedback on time allocation demands, participants elaborated on three primary areas: faculty members expressed they are overloaded with responsibilities; research output is suffering because of an ever increasing teaching, service, and administrative expectations, which receive little to no reward or recognition; and faculty members are concerned about the larger impacts of the expanding expectations.

First, almost every participant in the survey expressed that they feel overburdened with their service, teaching, research, and administrative duties. After being asked to indicate what percentage of their work time they spend on each area, many quickly pointed out that their total amount of time given to these activities exceeded 100%. Their comments included "As you can see, it's over 100% and that seems to be the expectation," "Yes, I realize that adds up to more than 100%," "The actual equation likely adds up to about 150%, not 100%," I realize this adds up to 170%," and "There should be a number higher than 100." Some of these participants elaborated on their time allocations. For instance, one individual explained that "Obviously, demands on our time add up to more than 100%. There's just no consideration for how much work goes into research . . . course prep, teaching large classes, teaching seminar or writing-based classes, and service."

Second, a large number of participants shared that because of the growing demands in other areas, research prevailingly becomes a secondary, or more often, a tertiary focus rather than a priority. Table 11 demonstrates this by showing that faculty spend 2.5% *less* time on research than expected while spending 6.5% *more* time on teaching than expected, 1.4% more time on "other" duties (mainly administrative), *and a staggering 37.7% more time on service than expected.* Table 11 and Figure 7 help to illustrate these differences.

Description of percentages & differences	Duty type			
	Research	Teaching	Service	Other
Raw % difference (actual time minus assigned time)	-1.12%	2.53%	8.17%	0.64%
Difference/Assigned time (percent more/less spent on responsibilities)	-2.5%	+6.5%	+37.7%	+1.4%

Table 11. Percentage differences between time assigned compared to time spent on duties.

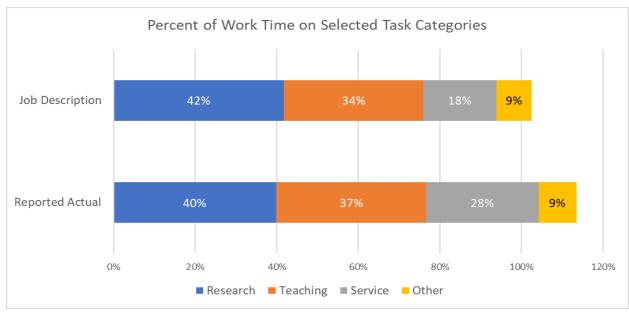


Figure 7. Average percentages compared between time assigned in job description to time actually spent on duties.

As additional tasks are heaped on faculty members, no extant duties are removed. One participant shared that, "I keep being asked to do more and more with nothing being taken off my plate. I don't have time to do research anymore." Most participants identified service expectations, followed by teaching duties, as the primary culprits. One individual commented, "Because students and committee meetings/colleagues are physically present, it's harder to push them aside during time crunches as compared to research." Other comments focused on the service load specifically: "The service workload is awful and has extremely impacted my research, I am very concerned about this," and "Service is killing me. Too many committees and so much bureaucracy. It takes away from my research." Moreover, participants added that because of these demands, faculty members must often use "personal time" for research projects: "Teaching and service has so dominated my academic year that almost all of my research productivity is on unpaid weekends and over the unpaid summer, when I cram to make up for lost time." Another individual noted that "Research is the real measure when pay is considered for increase but the teaching and advising and service load in my dept for professors is huge so research for me is always in my 'free' time. I never have any 'free' time so my research is slipping..."

Although faculty members are expected to tackle more duties, many participants are irritated that these tasks are frequently unrecognized or unrewarded. Participants focused extensively on service, which one described as "time-consuming, necessary, and unrewarded." Despite the surge in service expectations, these activities are generally offered "no meaningful credit" as they are minimally or not at all considered as part of annual performance evaluations or in tenure cases. One participant lamented, "My research has suffered due to administrative and advising demands. I have mixed feeling about this as I enjoy what I do, but recognize that while the University demands service and increasingly relies on faculty to fulfill administrative functions, our system does not adequately reward this work." Again, several participants expressed concern

that while service expectations are increasing, expectations for other areas remain unchanged. One individual summarized this issue: "One cannot be promoted for service' is a common theme heard by administrators, yet with our motto 'Ut Prosim' we're all expected to serve and continue to be as productive."

Finally, participants expressed and emphasized concern about the impacts related to the amount of time that they spend trying keep up with their duties. For instance, one individual stated, "I work 60-80 hours per week year round just to keep pace with my responsibilities." Others elaborated on the fact that their actual time allocations rarely match their expected time allocations. One individual claimed, "My appointment technically is 70% research and 30% teaching. Research outputs are what the administrators mainly use for my evaluation with a lesser weight on teaching. Yet I am still expected to provide service to the department/college/university and to professional societies. That cannot obviously be achieved in a 40h work week but take up my personal life too. It is simply not sustainable." Similarly, another asserted that "My college hews to the 40-40-20, but in practice pays little attention to the ratio, expecting far more than can be achieved in a sane and humane 'work week.'" Several participants also alarmingly raised concerns about the effects of this lifestyle on the personal and professional well-being of faculty members. One individual described the impacts: "This has affected everyone all at once so tensions are high and there is growing stress and discord. An unnerving number of faculty from departments have told me that they are working themselves to the point of physical illness and mental health crises." Interestingly, when you split the survey data by gender, job descriptions are about two to three times as good at predicting differences in actual work for men as for women. For total percent, the R-squared is 0.35 for men and 0.12 for women. For service, the R-squared is 0.67 for men and 0.32 for women. For whatever underlying reason, female faculty are feeling this disparity between research expectations and workload even more keenly than male faculty.

As detailed in the recent UK report¹⁰ on the increased demand for mental health services by academic staff, increased workload has led to significantly heightened levels of stress, pressures to perform, and fears about saying "no" when asked to take on additional responsibilities, courses, and administrative duties.

2.4 PIBB Integration with Research

When asked if or how PIBB should be used in conjunction with research assessment, individuals' qualitative responses reflected three primary themes: little to no familiarity with the PIBB model (2.4.1); distrust in the model's ability to fairly measure output (2.4.2); and concerns about the impacts of the model on research output (2.4.3).

2.4.1 Familiarity with the PIBB model

Many of the qualitative comments reinforced the quantitative responses as individuals stated that they are largely unfamiliar with the PIBB model and how it will impact assessment. One participant noted, "The above questions assume faculty know how the PIBB will affect research.

 $^{10}\ https://www.hepi.ac.uk/2019/05/23/new-report-shows-big-increase-in-demand-for-mental-health-support-among-higher-education-staff/$

There is not a 'do not know' option, which I suspect affects many faculty." As another faculty member responded: "Someone needs to explain how PIBB works. No one I've spoken with seems to know." Participants' levels of familiarity with the model fluctuated. Some indicated they were unaware of the model altogether through statements such as "Never heard of PIBB" and "What is PIBB?" A few individuals explicitly noted this lack of knowledge stemmed from little to no communication about the model. One participant claimed, "We are not given any information about PIBB at my department. I really don't know what it is." Another group of participants explained that their lack of knowledge about PIBB made them uncertain about how the model would impact their research output. For example, one individual stated, "I am still not clear on how the PIBB model will work, so, it is not clear to me how it will impact my work." Again, participants linked the lack of clarity back to a lack of explanation as one participant asserted, "Not clear on how the PIBB affected or is related to research. I sort of understand how it is related to teaching, but don't think that this has been made clear." Finally, some participants explained that they were unable to comment because they felt ill-equipped to respond. These individuals offered feedback such as, "I do not know enough about PIBB to respond to this question..." and "Cannot comment because I am not familiar with PIBB."

2.4.2 Level of trust in PIBB

Of those participants who expressed familiarity with the PIBB, a distinct distrust in the model was revealed. This spawned from its perceived overreliance on quantitative metrics and inability to fairly assess every department. Participants primarily focused on the model's quantitative bias. Comments included, "Privileges some types of research (\$\$ and quantitative) over others university wide" and "Overly focused on Quantitative." Several participants expressed that the model attempts to oversimplify measuring research output and impact by relegating assessment to a numerical system. One individual argued, "Can't assess qualitative distinctions. Can't quantify quality." Another compared the model to SPOT evaluations, suggesting that "Just like in teaching it all boils down to SPOT scores and the golden number 7 average, PIBB for research would end up doing the same."

Many felt that the current PIBB model would place select faculty members at a disadvantage. Because of the model's focus on the number of research outputs, some felt that the model is a disservice to those who may focus on larger, more time-consuming projects, such as books. One individual expressed, "How assess a book? Writing takes years... Then impact could take years." Others emphasized the variety of outputs produced by faculty at Virginia Tech, for which the model does not fully account. For instance, one participant shared, "Cannot be used fairly across the diversity of disciplines and expectations in the university." Similarly, another participant argued, "The PIBB should not be used in this way. In my field, the metrics are grossly inaccurate and fail to include large amounts of information. The metrics are unable to judge the quality of the publications as well. What is more, the system [can and will] be gamed to some extent...." Finally, another individual elaborated, "I am skeptical of the utility of the PIBB approach, as it seems to likely over-emphasize quantitative metrics that likely don't adequately capture the quality and real impact of faculty contributions, in whatever university mission the faculty member is engaged in. The diverse nature of faculty programs across the university will likely make this problem even worse..."

2.4.3 Concerns with PIBB impact on research

Individuals expounded on their concerns with the PIBB model to discuss the potential outcomes of the model. Overall, trepidations about the model reflected that *participants believe it will negatively influence the types of outputs that faculty pursue*. For instance, one individual offered that PIBB "Will encourage a 'what have you done for me lately' attitude for assessment. Will privilege scientific teams over all others." Another concern woven throughout responses was that faculty could be tempted to abandon long-term, high-quality projects for 'quick and easy' approaches, as captured by one individual's response: "It is a metric that has little to do with quality, and even when it purports to do so, it reduces quality to money, which will encourage, as so many such metrics do, short-term gain over long-term thought and writing."

Participants also disclosed a disconcerting unease that the PIBB's attempt to homogenize assessment across disciplines could devalue individual contributions. One participant claimed they do not see how the "PIBB model relates to my individual research productivity. Frankly, it seems more like a tool for administrators driven by metrics and numbers, where I am just a number and number generator amongst many other number generators." Additionally, others worried that a focus on the numeric reports of output will hurt the overall mission of Virginia Tech: "If the object is to drive faculty programs only to those that result in a very few outcomes, it may be successful, but at significant cost to the land-grant mission of the university, leading to even weaker public support." Finally, participants fear that the PIBB will cause a competition for resources, amplify stress, potentially generate strife, and decrease collaboration at a time the university is stressing transdiciplinary research. One participant advanced that Virginia Tech "Should NOT [use the PIBB] in conjunction with research productivity. If tenure and post-tenure reviews are functioning as they should (e.g. making sure that faculty are producing), then the use of the PIBB model should be unnecessary. All it would do is create greater stress and deincentivize collaborations by promoting competition between departments (i.e., there's a set amount of money, so we need to fight for it all ourselves)."

Ultimately, faculty sentiment is well represented by this comment: "The whole premise of using the PIBB in this way is ridiculous. How is comparing my research to an outside metric [going to] make me more productive? Giving me the time and resources to conduct my research will improve my productivity. Taking away time by requiring me to explain the inadequacies of the system being used to measure undermines my productivity, morale and my confidence in the decision makers."

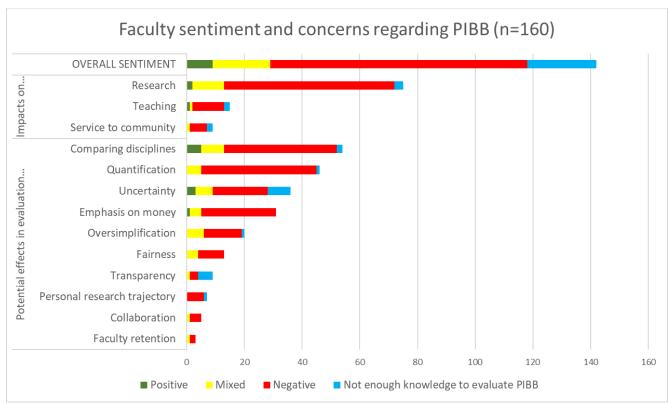


Figure 8. Faculty sentiment and concerns regarding the use of the PIBB in conjunction with research productivity.

2.5 Faculty Salary Considerations

Responses concerning the fairness of compensation fell into three general areas: a lack of percentile awareness and subsequent disappointment (2.5.1); a history of failed promises regarding salary increases (2.5.2); and problems regarding a lack of cost of living raises or raises based on inflation (2.5.3).

2.5.1 A lack of percentile awareness and subsequent disappointment

Overall, there was a general lack of awareness regarding current percentile in comparison to Virginia Tech's SCHEV designated peer institutions as well as the target percentile.

Awareness of SCHEV Designated Peer Institution Salary Comparisons								
Survey Question	Yes, I am aware.		No, I am not aware.					
	Count	Percentage	Count	Percentage				
I am aware the faculty salaries at Virginia Tech are currently in the 35th percentile in comparison to Virginia Tech's SCHEV designated peer institutions.	167	43.83%	214	56.17%				

I am aware the target for each Virginia institution's overall faculty salary average is the 60th	124	32.55%	257	67.45%
percentile of the average salaries of its SCHEV designated peers.				

Table 12. Awareness of SCHEV peer institution salary comparisons in terms of percentiles.

First, 56% (n=214) of participants shared that they were unaware of the current salary percentile, and 67% (n=257) were unaware of the target salary percentiles prior to this survey (Table 12). Responses included "I guess I am aware now..." and "I am now." After being presented with the information about faculty salaries at Virginia Tech compared to its SCHEV designated peer institutions, many participants expressed disappointment, shock, anger or a combination of the three. Statements of shock were common: "Shocking," "I did not know this, but I am not surprised," and "I knew our salaries were less than peer institutions. I did not realize our salaries were at that low of a percentile." One participant merely exclaimed, "Yikes!" as another shared, "Shock and despair. Thanks. (just kidding about the thanks part)." Several participants also supplied critical comments, asking "Why is this ok?" and deemed that the situation is "an outrage" and "pathetic." Some participants expounded, adding that this circumstance will likely have a negative impact on their loyalty to and desire to remain with Virginia Tech. For example, one individual declared, "I thought it was 40%, but [discover it's] 35. This statistic does not motivate me, rather just the opposite. It does not make me proud of VT." Likewise, another participant shared, "I knew we were low, but not that low! Wow, I should look for another job!"

2.5.2 A history of failed promises regarding salary increases

Second, other participants seemed largely unfazed by the information and recounted the history of the situation, expressing a higher level of awareness about the issue. These individuals noted that Virginia Tech has shared the 60th percentile (or similar) target for many years, stating that "This has been the target for at least 15 years," and adding that the university has yet to meet the goal. One individual proclaimed, "When President Sands took office (started even before him), the administration promised to reach the 60th percentile in 5 years but here we are in the same spot!" Similarly, another participant shared, "I've been at VT for many years; the university has never achieved the stated percentile goal for salaries." Another participant declared that Virginia Tech even lowered the goal at one point: "The target has been lowered from 66th to 60th percentile since I was hired, but it hardly matters since that goal has never been achieved and I had so many years with 0% increase." Many individuals who have been with the university for extended periods of time seemed disheartened and appeared to accept that this goal is unimportant to university administrators: "The target and actual salary percentile has remained unchanged since I have been here (15 years). I have given up any hope our aspirations will meet reality."

Regardless of whether faculty knew of the percentiles, overall feelings of fairness about compensation were quite low.

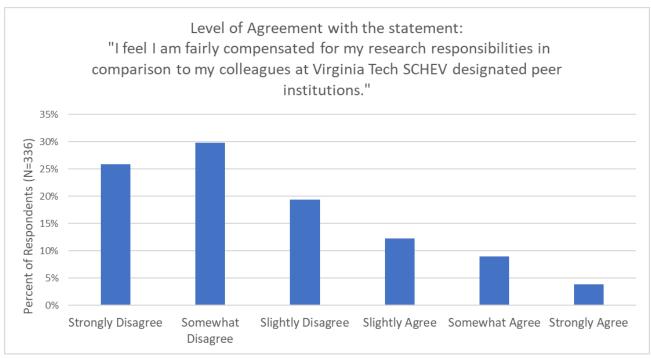


Figure 9. Perceived fairness of compensation for research compared to SCHEV peers.

As can be seen, even before knowledge of the discrepancy between Virginia Tech and SCHEV peers was known, dissatisfaction about compensation was quite high, with almost 75% of participants feeling they are inadequately compensated for their work.

2.5.3 Problems regarding a lack of cost of living raises or raises based on inflation

Several comments emphasized problems with faculty not receiving cost of living raises or raises based on inflation. One participant responded, "This is appalling. Particularly considering the cost of living in Blacksburg or NRV is at a much higher percentile nationally." Another added, "Tech is known in my professional circles to be at the bottom of the ladder for rate of pay. When you factor in the cost of living, it is even worse in comparison, rather than better, as I thought it would be. This is a regular source of stress. There is also stress in not having regularly scheduled raises for COL increases. The 'merit' raises barely cover COL, and then don't address having started behind the curve for pay overall." Several participants focused on the rising cost of living in the Blacksburg area: "The university has long touted Blacksburg's lower cost of living, as a trade off for lower salaries. Yet housing prices in Blacksburg are significantly inflated, owing to the paucity of single-family homes, with a negative impact on the overall cost-of-living index. Compounding this shortfall is the lack of adequate child care...I have witnessed a high degree of turn-over at Tech, and completely understand why."

3.0 OVERALL POLICY RECOMMENDATIONS

In keeping with faculty sentiment, many of our recommendations ultimately need to be implemented at the department level. This needs to be communicated to departments, *and* departments need to be provided with resources to be able to respond to what they are asked to

do as far as reporting assessment. Departments are encouraged to have an open and inclusive discussion about assessment standards in their discipline, and what would make for fair assessment in their department. Should department environment preclude such a discussion, such information could be anonymously obtained and disseminated.

In making our recommendations, we are keeping in mind the large number of faculty who cite "administrative work" as a part of their position responsibilities that makes it impossible to do all their work in the assigned time, or who note "administrative work" as something they have to do *in addition to* their assigned responsibilities. In short, college and university imposed administrative tasks (such as eFars, additional assessment reporting, mandating increased teaching assessments, required faculty mentoring from associate to full, etc), all negatively impact faculty productivity.

3.1 Research Assessments and Workloads

Overwhelmingly, participants stressed that it is inappropriate to rely on quantitative measures across the board, and that there is a strong need for individualized, qualitative research assessment.

In the international research assessment community and the broader academic community, there are at least two major efforts to develop responsible research assessment and metrics use practices. The first is the Leiden Manifesto, 11 which was in direct response to some of the pervasive misuses of research impact metrics within the academic community. The second is the San Francisco Declaration on Research Assessment, 12 or DORA, which was initially in response to the use and abuse of the Journal Impact Factor to measure the value and impact of individual researchers and their individual research outputs. Institutions across the world have either signed DORA or have developed policies around Leiden or DORA, or both, to fit their institution profiles. One such university is Loughborough University, which developed its own responsible use of research metrics policy, 13 based on the Leiden Manifesto. Other such policies are on the rise, 14 especially in the UK.

Many of the responses from our faculty echo the positions of both Leiden and DORA. As seen in the comments above, the tone of responses suggests that there is some level of dissatisfaction, distrust, skepticism, and confusion regarding the research assessment practices of departments, but this quickly rises and intensifies at the college and university levels. Furthermore, many of these responses indicate that faculty are over-burdened with data reporting and numbers-driven assessment. In his book *The Tyranny of Metrics*, ¹⁵ Dr. Jerry Z. Muller explains an alternative to numbers-driven assessment:

What, you might ask, is the alternative to tallying up the number of publications, the times they were cited, and the reach of the journals in which articles are published? The

¹¹https://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351

¹² https://sfdora.org/

¹³ https://www.lboro.ac.uk/research/support/publishing/responsible-use-of-metrics/#d.en.1159418

¹⁴ https://thebibliomagician.wordpress.com/resources/

¹⁵ https://www-jstor-org.ezproxy.lib.vt.edu/stable/j.ctvc77h85

answer is professional judgment. In an academic department, evaluation of faculty productivity can be done by the chair or by a small committee, who, consulting with other faculty members when necessary, draw upon their knowledge, based on accumulated experience, of what constitutes significance in a book or article. In the case of major decisions, such as tenure and promotion in rank, scholars in the candidate's area of expertise are called upon to provide confidential evaluations, a more elaborate form of peer review. The numbers gathered from citation databases may be of some use in that process, but numbers too require judgment grounded in experience to evaluate their worth. That judgment grounded in professional experience is precisely what is eliminated by too great a reliance on standardized performance indicators. As one expert ¹⁶ in the use and misuse of scientific rankings puts it, "All too often, ranking systems are used as a cheap and ineffective method of assessing the productivity of individual scientists. Not only does this practice lead to inaccurate assessment, it lures scientists into pursuing high rankings first and good science second. There is a better way to evaluate the importance of a paper or the research output of an individual scholar: read it" (p. 80).

To be clear, there were a high number of participants that indicated that there is already a level of responsible research assessment within their departments and units; some describe how department heads use qualitative narratives or letters of evaluation either in conjunction with quantitative measures or on their own. Like Muller, we do not discount metrics, but rather advocate against over reliance on metrics. Metrics can help tell a story about research and support qualitative, expert assessment (Leiden Manifesto, ¹⁷ Principle 1).

For example, what does the calculation of the author h-index (the number of publications relative to the number of citations to those publications) by a given author really mean? For one, it literally means that a researcher with a high h-index has published many papers which have mostly been cited quite a lot. However, this type of build-up of publications and citations typically takes many years if not decades, so it automatically disadvantages early-career academics. In addition, researchers in the social sciences and, in particular, the humanities, in which the number of publications and citations is typically not as high also appear to be "less productive" than those in the STEM fields, because this metric is not normalized across disciplines. Therefore, the h-index does tell us something about the productivity of a researcher over the course of a long career, but it is more biased in favor of those in the STEM fields, and even within STEM fields, there is much variation in publication and citation behavior. We have to be careful in how it is used and the expectations that are placed on faculty when asked to report their h-index.

The number of publications produced is a metric that a majority of survey participants indicated that their departments or units require be reported, but far fewer participants indicated that they find it professionally or personally valuable. It should be noted that though there are fewer publications produced among those in the social sciences and especially the humanities, such as history, and these publications often take the form of books and monographs that take many years to research and write. The number of publications produced, therefore, also presents a distorted picture of the quality and impact of research, even in STEM fields: "When individual

¹⁶ https://doi.org/10.1038/465870a

¹⁷ https://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351

faculty members, or whole departments, are judged by the *number* of publications, whether in the form of articles or books, the incentive is to produce *more* publications, rather than *better* ones" (Muller, ¹⁸ p. 79). The UK currently assesses all of its public research institutions through the Research Excellence Framework (REF), ¹⁹ which goes through six-year cycles; the REF was recently improved upon to score researchers based on qualitative, expert peer review. However, its previous form, called the Research Assessment Exercise, required that institutions report the number of publications as a direct measurement of quality, which resulted in a great many unread, uninteresting, and uncited publications. ²⁰

In addition, there is a great discrepancy between citation counts and citation lifespans across disciplines. Humanities citation lifespans tend to last considerably longer than STEM citation life spans, but "biomedical sciences have the most cited articles, and humanities the least cited, not because of their different "scientific impact," but mainly as a consequence of the different citing cultures of these fields" (Gingras, *Bibliometrics and Research Evaluation: Uses and Abuses*²¹). The Journal Impact Factor is another potentially problematic metric for two main reasons: it is also not normalized across disciplines, and it is not generally recommended for use in evaluating individual researchers or individual papers (see DORA²² and the Leiden Manifesto²³ for more details). Specifically, DORA signatories do not use journal metrics in hiring and promotion decisions.

Furthermore, with respect to bibliometrics or citation metrics in general, there are multiple issues concerning the accuracy of assigning quality to research and their authors based solely or even partially on these metrics. Multiple inherent biases exist in citation behaviors, such as "self-citations, negative citations, wrong citations, multi-authorship-biased citations, honorary citations, circumstantial citations, discriminatory citations, selective and arbitrary citations, etc." (Moustafa, "Aberration of the Citation"²⁴). These issues can cross over into other types of metrics, such as usage statistics and altmetrics, but it is less common with these types of metrics since they are not as relied upon in formal research evaluation practices. In addition, researchers often do not report or publish negative results ²⁵ because they know that publications that report negative results typically do not receive as many citations; in other words, they are disincentivized from reporting negative yet important scientific results. However, some academics have recognized this problem, and in order to record more scientific knowledge and prevent the duplication of research efforts (an often costly, time-consuming, and wasteful process), journals that focus only on negative results have recently been established. ²⁶

¹⁸ https://www-jstor-org.ezproxy.lib.vt.edu/stable/j.ctvc77h85

¹⁹ https://www.ref.ac.uk/

²⁰ https://books.google.com/books/about/Education Education Education.html?id=i6S7BAAAQBAJ

²¹ https://mitpress.mit.edu/books/bibliometrics-and-research-evaluation, p. 15.

²² https://sfdora.org/

²³ https://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351

 $^{^{24}} http://login.ezproxy.lib.vt.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true\&db=cmedm\&AN=26\\ \underline{636372\&site=eds-live\&scope=site}$

²⁵ https://www.jctres.com/media/downloads/jctres032017s2001/Earp2017JClinTranslRes 2.pdf

²⁶ Examples include the *Journal of Negative Results*, http://www.jnr-eeb.org/index.php/jnr; Journal of Negative Results in Biomedicine, https://jnrbm.biomedcentral.com/; Negative Results, https://jnrbm.biomedcentral.com/; Negative Results, https://jnrbm.biomedcentral.com/; Negative Results, https://jnrbm.biomedcentral.com/; Negative Results, https://jnrbm.biomedcentral.com/; Negative Results, https://jnrbm.biomedcentral.com/; https://jnrbm.biomed

There are similar criticisms of national and international university ranking practices, which have largely become a marketing exercise ²⁷ and have little to no effect on increasing student enrollment numbers, ²⁸ or on demonstrating the quality of education, ²⁹ or on measuring the influence of the institution. ³⁰ In fact, one metrics expert, Carl T. Bergstrom, actually helped develop a ranking system of journals based on quantitative metrics (the Eigenfactor), but his purpose was to help scholars find and discover other similar research³¹ and researchers in their fields (similar to why Eugene Garfield invented the Journal Impact Factor³²). Bergstrom further states that "all too often, ranking systems are used as a cheap and ineffective method of assessing the productivity of individual scientists. Not only does this practice lead to inaccurate assessment, it lures scientists into pursuing high rankings first and good science second. There is a better way to evaluate the importance of a paper or the research output of an individual scholar: read it." There is, however, one international effort to make university ranking practices more accountable and scientific, and so far, this working group has created a living document of a list of criteria for fair and responsible university rankings. ³³

This section could become an exhaustive list of research impact metrics, college rankings, and their advantages, appropriate use cases, limitations, and dangerous misuses (for more about different types of research metrics, see the Metrics Toolkit;³⁴ see also: "How to improve the use of metrics"³⁵). However, the main takeaway can be summed up by a simple yet thought-provoking statement known as Goodhart's Law: ³⁶ "When a measure becomes a target, it ceases to be a good measure."

The following are recommendations for the university, colleges, and departments based upon the information shared above. As faculty members carry out the actions to fulfill these recommendations, the committee urges that the added workload necessary for their enactment be balanced by reducing workload elsewhere and formally providing service credit for the work completed in this area.

Recommendation: That the university develop a brief, department level driven, university-wide responsible research assessment statement of principles in order to provide departments and colleges guidance for responsibly, effectively, and fairly assessing faculty research. Such a statement will need to be inclusive and carefully written in order to support a diverse faculty research production rather than hindering it.

²⁷ https://www-jstor-org.ezproxy.lib.vt.edu/stable/10.1086/517897

²⁸ https://www.emeraldinsight.com/doi/full/10.1108/S0733-558X20160000046009

²⁹ https://www.newyorker.com/magazine/2011/02/14/the-order-of-things

³⁰ https://www.nytimes.com/2015/10/02/business/new-college-rankings-dont-show-how-alma-mater-affects-earnings.html

³¹ https://doi.org/10.1038/465870a

³² http://garfield.library.upenn.edu/papers/jamajif2006.pdf

³³ https://inorms.net/wp-content/uploads/2019/05/fair-ranking-consultation-text.pdf

³⁴ http://www.metrics-toolkit.org/

³⁵ https://www.nature.com/articles/465870a?proof=true&platform=oscar&draft=collection

³⁶ https://en.wikipedia.org/wiki/Goodhart% 27s law

Recommendation: Each department should review its research assessment documents to ensure that standards for assessment are made clear in writing. Noting the current over-reliance on quantitative metrics, several participants focused on the need to also include a qualitative narrative that permits faculty members to explain their productivity and provide evidence of impact beyond citations. They advocate that the inclusion of this narrative would provide a more holistic overview of their contributions. Therefore, both quantitative and qualitative aspects of assessment should be included, with a focus on detailing and privileging the qualitative aspects of assessing the nature of the research, in particular, expanding beyond the most used categories as shown in Table 9 above. With this in mind, each department should consider surveying its faculty to determine different forms of research production (publications and impact), and consider expanding what constitutes rewardable research. Several comments underscored the need to consult faculty members on appropriate measures of assessment for each department, such as this one: "Let the researchers, NOT the administrators, define how their research should be assessed. There are so many different research fields that the administrators would not be able to understand all." Responsible use of metrics also means that "one size doesn't fit all"³⁷ and that responsible assessment should always be approached with extreme care.³⁸ This is especially true in light of changing disciplinary norms often embraced by junior faculty members and also the university's embracing of transdisciplinary research. In addition, rewarding "extraordinary" research as well as research that makes an impact on local communities should become a priority.

The Research Excellence Framework (REF) in the UK³⁹ (also see its drawbacks⁴⁰) and the Standard Evaluation Protocol (SEP) in the Netherlands⁴¹ (learn the basics here⁴²) are good starting points for learning more about standard systems of research evaluation. It should be noted that *the REF is not a perfect system*, especially since it claims to be expert review process while really being an expert scoring process; it has been simultaneously praised and heavily criticized as its reviewers and managers work to improve the process. The REF can be useful to reference when making decisions about how to use quantitative and qualitative measures to review faculty. SEP, on the other hand, seems to be more genuinely praised and welcomed by faculty in the Netherlands.

Recommendation: Minimize college and university imposition of standards of assessment, especially given the level of distrust of assessment emanating from those levels possessed by faculty. The focus at those levels must be on fairness of the process of yearly assessment and promotion and tenure (P&T) assessment at the department level, not on imposition of specific measurements and reporting practices that colleges and the university desire. Several participants expressed sentiments similar to this comment: "Decisions about P&T, productivity, and worthiness should ABSOLUTELY remain at the department level, with the college and university ONLY making certain the P&T process was fairly conducted by the department. More department control, less college and university interference." Colleges and the university are not

³⁷ https://www.cwts.nl/blog?article=n-r2s294&title=responsible-metrics-one-size-doesnt-fit-all

³⁸ https://thebibliomagician.wordpress.com/2019/05/15/the-blind-and-the-elephant-bringing-clarity-to-our-conversations-about-responsible-metrics/

³⁹ https://www.ref.ac.uk/

⁴⁰ https://thebibliomagician.wordpress.com/2019/04/24/three-thoughts-about-ref-peer-review/

⁴¹ https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/SEP2015-2021.pdf

⁴² https://thebibliomagician.wordpress.com/2018/05/31/research-evaluation-things-we-can-learn-from-the-dutch/

in a position to determine best measurements, but rather should ensure overview of department determined practices of assessment. Assessment drivers must emerge organically from the department level from individual faculty input.

Recommendation: Departments should not impose overly-burdensome and unrealistic expectations on faculty to bring in large grants. Each discipline is different and thus grants and grant award amounts vary greatly. In addition, some research does not require grant dollars or may not succeed in obtaining grant dollars and thus should not be valued less than research that does bring in grant dollars.

Recommendation: Each department should make certain that works which take longer to produce (books, music compositions, plays, etc.) are judged differently than journal articles and other more quickly produced works, and that assessment rewards go beyond the one shot date of publication. For example, many universities give the author of a book the highest level of research assessment in both the year of publication and the year after to reflect the nature of writing a book length research project. Some research is inherently more difficult to perform, and departments (as well and the college and university) need to consider this honestly. Additionally, the effects of some output may take longer to materialize, and this complexity should be accounted for during the review process. Several participants stressed that the current assessment process is restrictive, and made this suggestion: "The longer view would be best. The constant annual assessment does not allow time for deep dives into a research area, especially really new and groundbreaking areas that take time to flourish." Depending on the department and its faculty, metrics may need to be adjusted to account for these considerations.

Recommendation: No new service or administrative expectations should be imposed on researching faculty without taking others away first. To enhance faculty focus on research, departments must be provided with the resources to reduce both teaching and service expectations. Several comments such as this one appeared in the text-based responses: "I have a very heavy teaching and service load that interferes with my ability to do my research." For instance, moving from Blackboard to Scholar, and then from Scholar to Canvas, took an inordinate amount of time away from research, but no credit was given for the time to learn the new systems, and no responsibilities were taken away from researching faculty so they could learn the new systems. We are not necessarily talking about reduction of teaching load (2/2 being the norm), but rather the impositions and expectations of additional reporting, new course preps, additional student advising, teaching assessment, etc. without reducing research expectations and rewarding the other activities more. Increasing access to administrative support could also contribute to enhancing faculty focus on research.

Recommendation: Eliminate the EFAR for certain departments and perhaps colleges, or indicate its value as a high priority system for the university by communicating any benefits (current or future) to faculty and by providing departments with administrative resources to support faculty data input. For example, a benefit of Elements is that it provides an easy method to submit works to the Virginia Tech institutional repository, VTechWorks, including guidance about when specific journals' copyright policies allow deposit of publications to such a repository. Ultimately, we feel departments should be able to "opt-in" to using the system if they so choose, and not be forced to do so. Faculty find it burdensome, not responsive to their

discipline specific concerns (save for a few exceptions in STEM disciplines), and generally useless in their program of research. This comment captured the sentiment of most participants who discussed the EFAR: "EFARS is simply for reporting to the university. I am not sure there is any other benefit to EFARS."

Recommendation: Consideration of the creation of a position of "faculty research liaison" either at the college or university level. This person would bridge the gap between real faculty concerns and administrative attempts at faculty control. We have research deans, but they represent the administration. This individual could be a regular faculty member given a reduced teaching/research load to perform this duty. This liaison could also help educate deans, administrators, and faculty members on responsible and fair research assessment and uphold the principles of a formal university policy.

All of these recommendations will not only lead to *more responsible and reliable indicators of research impact*, but they will also likely lead to *better mental health outcomes among faculty* as indicated by the new UK report⁴³ that confirmed a significant increase in the demand for mental health services by academic staff. The following recommendations were made in the report:

- More realistic workload allocations;
- More responsible use of metrics;
- Better performance management, policies which embed a developmental function and which recognize the long-term goal-setting which is appropriate for academics;
 - This is important when recognizing the long-term goals of writing books versus journal articles, for example.
- A commitment by universities to sustainable careers and a pathway from postdoctoral research to lectureship.

3.2 PIBB Integration with Research Assessment

There is no question that the majority of faculty have only a passing knowledge of the PIBB model of funding as it applies to Virginia Tech. However, both those with low and high levels of knowledge agree that the PIBB applied to research is something with which they strongly disagree, and numerous deficiencies in the system were identified. For instance, it is clear in the PIBB model that external/sponsored research is a large enough percentage that it could negatively or positively influence a department's budget. Faculty in departments that are not expected to procure external funding would be disadvantaged in the PIBB model. As a result, faculty are concerned about the potential impact of including a heavily weighted external/sponsored research component in the PIBB model. Moreover, it is noted that the PIBB model attempts to affect behavior and relies heavily on quantitative metrics. This will inevitably

⁴³ https://www.hepi.ac.uk/2019/05/23/new-report-shows-big-increase-in-demand-for-mental-health-support-among-higher-education-staff/

^{44 &}lt;a href="https://www.apps.provost.vt.edu/pid/Fall%202018%20Update%20Slides_transcription.pdf">https://www.apps.provost.vt.edu/pid/Fall%202018%20Update%20Slides_transcription.pdf pp. 5 and 13. Found at https://www.provost.vt.edu/initiative_presentations.html

result in superficial counting and real constraints on original research that might fall outside the PIBB model of productivity. The recommendations reflect these concerns.

Recommendation: Overall, faculty recommended that PIBB not be used to assess research. This is a *strong* sentiment, and implementing PIBB in research assessment will have a deleterious effect on faculty morale.

Recommendation: If research assessment is incorporated, incorporation must begin with educating faculty about the model. For example: "I need a better explanation from university, college and department on PIBB, a meaningful PPT or video with example should help a lot more. Department head needs to explain this to faculty!!!" And, "I feel as the PIBB model should be more deeply explained to the faculty, and the link between research productivity and it should be made clear. The administration should make themselves available at faculty meetings in order to transmit this information, and demonstrate they understand the concerns of certain department. I feel as if PIBB should not be used in conjunction with research productivity, because if students and grants are the primary money maker, then where is there time for research?"

Recommendation: If incorporated, the preference is for including individual faculty considerations: "If use: Metrics should emerge contextually from the faculty member's research agenda and trajectory" and "If the university wants to increase research productivity, the first step would be to ask faculty how this might be achieved." Faculty at the department level, not administrators at the college or university level, must determine "metric": "It should rely upon assessments from departments as to the excellence of the scholarship produced."

Recommendation: If incorporated, all quantitative measures of productivity should be eschewed in favor of qualitative assessments such as that found in the Research Excellence Framework⁴⁵ (REF) from the UK and the Standard Evaluation Protocol (SEP) in the Netherlands.⁴⁶ These types of measurements of productivity and impact allow for giving credit for large projects (book, multi-year analyses, etc.) spanning multiple years instead of just the one year the book or similar project comes out. (See here examples of responsible research assessment/metric statements.⁴⁷)

Recommendation: If incorporated, we recommend that any use of the PIBB model for research assessment also include allowance for collaborative and transdisciplinary work.

3.3 Faculty Salaries

Although not all faculty knew of the low SCHEV peer percentile in which VT faculty find themselves, they were already largely dissatisfied with their compensation, and *this represents a chronic morale issue for the university, one impacting hiring, retention, and productivity.* The

⁴⁵ https://www.ref.ac.uk/

⁴⁶ https://www.vsnu.nl/files/documenten/Domeinen/Onderzoek/SEP2015-2021.pdf

⁴⁷ https://thebibliomagician.wordpress.com/resources/

University is over-relying on "Hokie loyalty" instead of equitable pay to keep faculty here, and as word of the discrepancy increases, so too will faculty dissatisfaction and departures.

Even as Virginia Tech prides itself on its research productivity, and having high caliber faculty in the top 30 percent among R1 institutions, it has failed to fairly compensate its faculty, even lowering its aspirational salary range from 66th percentile to 60th percent. Although Virginia Tech purports to aspirationally adhere to the state recommended goal for faculty salaries to fall within the 60th percentile of its SCHEV peer group, according to Virginia Tech's Office of Institutional Research, current Virginia Tech teaching and research faculty average salary as compared SCHEV peers as of Fall 2017 was in the 35th percentile and the projected average for Fall 2018 is in the 33rd percentile.⁴⁸

The official university projections for annual faculty salary rate increases needed to achieve the 60th percentile of SCHEV peers is 5.5% in 4 years or 4.6% in 6 years, but these projections do not take into account that Virginia Tech SCHEV peers will also have salary increases during those years, so to achieve its goal, the actual rate will need to be higher.

Faculty salaries have been mired in the lower 30th percentile for at least the past 15 years, during which time the upper administration has repeatedly stated it is working to achieve faculty salaries in the 60th percentile. During this time, while faculty salaries have remained low, *senior* administrator salaries have reached approximately the 50th percentile when compared with SCHEV peers:

https://bov.vt.edu/assets/Attachment%20HH_Approval%20of%202018-

19%20Faculty%20Salary%20Program Posting%20Version.pdf

⁴⁸ Virginia Tech, "2018-19 Faculty Salary Adjustments Academic, Research, and Student Affairs Committee and Finance and Resource Management Committee August 27, 2018" report to BOV.

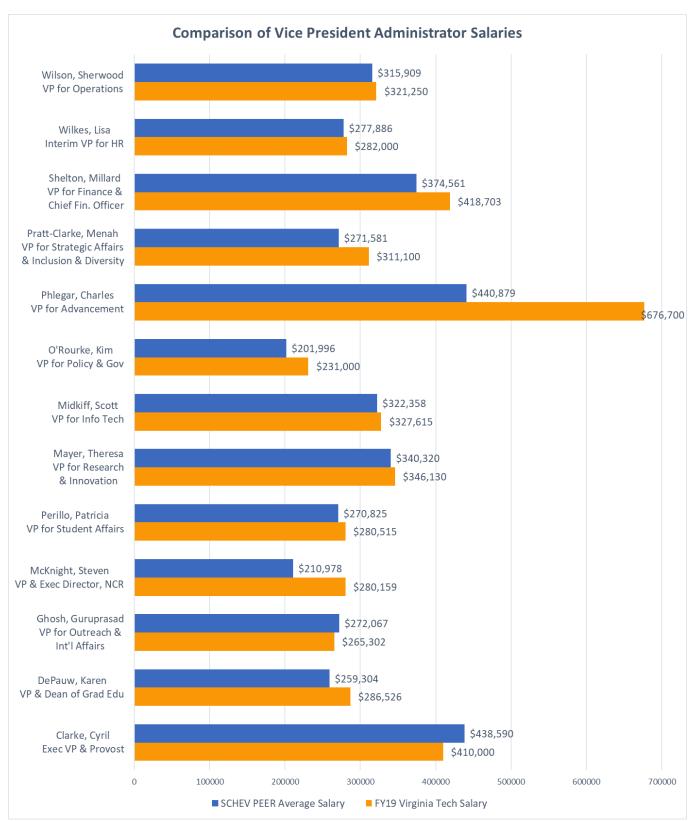


Figure 10. Administrator Salaries at Virginia Tech Compared to SCHEV Peer Average Administrator Salaries. Excludes office of president due to inability to obtain additional benefit numbers.

It seems hardly needful to point out the demoralizing effect this knowledge has upon our faculty.

Of note, faculty salaries for professors at Virginia Tech are just slightly higher than the average at Carnegie-classified R2 (high research activity) universities, and well under the average salaries for Carnegie-classified R1 (highest research activity) universities; for assistant and associate professors, the average Virginia Tech salary is about midway between the average R1 and R2 salaries; the salaries for full professors at Tech is much closer to those full professors at R2 institutions than to the salaries for full professors at R1 institutions. (Table 13).

2017 Average Salaries									
Faculty Rank	Car	Virginia							
·	Highest Research Activity (R1)	High Research Activity (R2)	Research Activity (R3)	Tech					
Assistant Professors	\$93,320	\$78,857	\$72,047	\$86,572					
Associate Professors	\$106,938	\$91,945	\$86,296	\$97,297					
Professors	\$165,890	\$124,594	\$109,858	\$137,265					

Table 13. Average faculty salaries for Carnegie-classified R1, R2, and R3 universities compared to Virginia Tech faculty salaries. Data obtained from the Chronicle of Higher Education.⁴⁹

The situation is even worse when compared specifically to our SCHEV peers, with Tech caught in a low level of compensation for a high level of research work as reflected in our overall projected 2018 ranking of 33rd percentile among our SCHEV peers. As one participant, well representing the sentiment of the whole, noted, "Wow! This is very concerning considering we are a top 20 research institution. We should focus on getting that number to the 75th percentile ASAP!"

Obviously, there is a colossal morale issue here, with some participants actually going so far as to suggest they should be looking for new positions elsewhere. As word of the discrepancy spreads, morale will only worsen. If Virginia Tech expects the quality of faculty researchers to be in the 70th percentile or better, it should pay them the same, and not rely on "Hokie loyalty" to cajole faculty into accepting salaries in the 30th percentile. Faculty are well aware that the upper administration finds the funds to develop projects and programs, and to expand administrative staff it deems as important, and *lack of progress in achieving aspirational salary goals will only further damage the relationship between the faculty and upper administration.*Moreover, such a disparity will only continue to make both recruitment and retention increasingly difficult, and be a continuing source of embarrassment for Virginia Tech.

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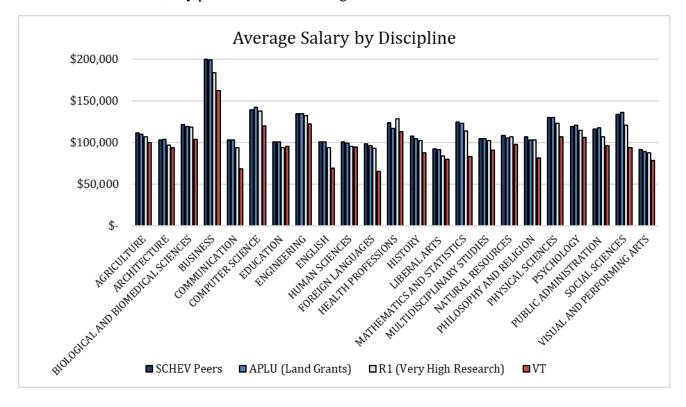
⁴⁹ https://data.chronicle.com/category/ccbasic/15/faculty-salaries/ Salaries for VT taken for the 2018/2019 school year. Peer salaries mainly generated using most current data, including 2017/2018 and 2018/2019 academic year.

Another area of concern is with Virginia Tech basing pay increases solely on "merit." By default, these raises are generally at a level on par with a simple cost of living raise, and are generally applied across the board in a manner similar to a cost of living raise. The actual average rate of growth for teaching and research faculty from 2007-2017 was 2%, which is barely above the Social Security average COLA of 1.9% during the same time period. In short, the university has not been providing raises at all, and has barely kept up with the minimalistic COLA calculations of Social Security.⁵⁰ Add to that consideration of average inflation over that same time period⁵¹ of approximately 2%, and one can see that Virginia Tech's rate of raises is essentially flat.

Recommendation: The Faculty Senate should *prioritize* better educating faculty about the actual and aspirational percentiles associated with their salary in comparison to Virginia Tech SCHEV peers, and make obtaining faculty SCHEV parity raises its primary focus until such is obtained.

Recommendation: The university should implement *immediately* a plan for raising salaries to at least the 60th percentile, with a true aspirational 75th percentile goal to better reflect the university's actual research profile. Given that some disciplines at Virginia Tech experience much greater salary disparities in relation to our SCHEV peers than others, we recommend that raises made to address percentile concerns be allocated differentially.

VT's Office of Institutional Research used 2017-18 Oklahoma State salary survey data to compare average salaries by discipline. Comparing teaching and research faculty of all ranks on a 9-10 month contract, they produced the following chart:



⁵⁰ https://www.ssa.gov/OACT/COLA/colaseries.html

⁵¹ https://inflationdata.com/inflation/Inflation Rate/CurrentInflation.asp?reloaded=true

Figure 11. Average Salary by Discipline of SCHEV Peers, APLU Land Grant, R1 and Virginia Tech Faculty

As can be seen, some disciplines are considerably closer to achieving the 60th percentile in relation to their peers than others. Disciplines with greater disparity should have an initial greater share of resources devoted to salary equity; for instance, communication, English, foreign languages, mathematics and statistics, and so on.

Recommendation: Once salary percentile is achieved, move to salary increases based upon a cost of living model with an additional and separate pool specifically for merit increases *in addition to the regular cost of living increases*. This will help to insure that Tech does not again slip into a low salary position, and will also maintain a focus on rewarding work that contributes to the university's research stature as a top R1 institution.

Recommendation: That the university adopt the recommendations concerning retirement contained in the Virginia Tech Employee Benefits Committee's January 2017 report to President Timothy Sands, "Need for Improved Benefits" (See Appendix C). Although not directly linked with salary among our SCHEV peers, the report links Tech's overall substandard benefits package, of which retirement plays a part, to lack of competitiveness in hiring and retention. Attention to making retirement as well as salaries more competitive will increases Tech's ability to attract and retain top faculty, and also address the flagging faculty morale issue.

4.0 COLLEGE/UNIT LEVEL SUMMARIES

College/unit representatives provided a summary of their respective college/unit survey results. These results reflect the more college specific concerns reflected in the survey results as determined by these members.

4.1 College of Agriculture and Life Sciences

There were a total of 79 CALS participants, of which 65 were tenure track (TT). Based on a total of 212 TT faculty, this represents a 30.7% response rate from CALS TT faculty. There were 6 research, 6 administrative and professional and 2 other faculty, with no continued appointment or collegiate faculty represented. participants were evenly split among Asst., Assoc., and Full Professor ranks. 100% felt they are required to do research/scholarship as part of their jobs. Below we look at four areas: how the college assesses research (4.1.1); the place of the PIBB (4.1.2); fairness of research assessment (4.1.3); and salary issues (4.1.4).

4.1.1 How the College assesses research

CALS faculty selected EFARS as the most widely used research profile system, but this was only because it is mandated by the university, as summarized by comments such as "EFARS is simply for reporting to the university. I am not sure there is any other benefit to EFARS." Only a few people indicated value for EFARS beyond this function and only 10% of participants found it to be personally or professionally valuable. They also use ORCID and Google Scholar to track

and showcase their work, with smaller numbers using Linkedin, ResearchGate and social media such as Twitter and Facebook to network. Nearly 90% of participants felt they are expected to use EFARS for P&T and reporting, and about a third of participants felt the same about ORCID. Aside from this, very few people felt they were expected to use any of the networking or social media platforms; if they use them, it is out of a perceived personal or professional gain. As for the research metrics they rely on (Q60), there was a wide range indicated. Interestingly, there is a disparity in many of the metrics for evaluation between what participants thought they were supposed to use and those they find personally valuable. For example, far more people indicated that they are expected to use the traditional metrics of number of publications, journal impact factor, grant proposals, and grant awards for purposes of P&T/supervisor evaluation than found them personally valuable. In contrast metrics such as citation counts, h-index, and usage statistics were perceived as more personally or professionally valuable by faculty participants. The comments on this question did not present a consensus, but generally supported these numbers.

4.1.2 Place of PIBB in research assessment

Most participants were not well familiar with the PIBB, nor do they feel affected by it (Q63 and Q64; 1.44 and 1.05, respectively on a 0-5 scale). In response to whether people feel the PIBB should be used in conjunction with research productivity, comments reflected this large degree of unfamiliarity and uncertainty. Many did not know anything about the PIBB model ("Never heard of this before"), and many others who had heard of it were not clear about how it works or whether it is impacting them ("I don't know enough about it to know how it could impact research activities"). Layered on top of this is a large amount of distrust about what PIBB will do. None of the participant comments viewed the PIBB positively, although several thought that it would not have any detectable effect. The majority of comments questioned the fairness of the PIBB model ("I don't know how it could be used fairly across the diversity of disciplines and expectations in the university."), and CALS may be somewhat unique in having a substantial extension component that is challenging to communicate across the university. This is reflected in comments such as, "Quantifying connections is hard, and much of the work we do (or should do) as a land grant has to do with outreach and applied aspects of the work."

4.1.3 Fairness of Research Assessment

The questions on fairness of assessment of research by departments (Q67 and Q68) were answered similarly for CALS compared to the overall university. CALS faculty felt that their research output was fairly assessed by their department head (median=2.91, mode=4, 0-5 scale) and the College administration (median=2.86, mode=4, 0-5 scale). Comments of survey participants indicate a general dissatisfaction with the process. One theme is the complexity of research and the difficulty in evaluating it by numbers alone (e.g., "It is very difficult to assess research based only on numbers, yet numbers are still important. The challenge is to balance such metrics with an understanding of the unique potential and challenges of each faculty position."). This reflects a sentiment that administrators are taking the easy path of counting numbers of publications and dollars, and not appreciating nuances of individual research programs. While dollars and publications are important, the assessment should also consider quality and impact of programs, collaborative and interdisciplinary work and mentoring of graduate students. Several also mentioned the difficulties in assessing effectiveness of extension

programs and applied research. Several remarks argued against using impact factors in assessment, and none supported this metric. Yet there is a general sentiment that "The focus should be on quality and not quantity of research".

4.1.4 Issues on Salaries

Fifty-five percent (55%) of the CALS participants did not realize that faculty salaries at Virginia Tech are in the 35th percentile compared to our peer group and 62% did not know that the target is the 60th percentile. This was an eye-opening revelation to many, but for those who have been at Virginia Tech for awhile, it is the same story for the last few decades. Other issues that were brought up included salary compression when Assistant Professors are brought in at salaries comparable to more senior faculty, gender inequality in salaries and the lack of merit raises above cost of living increases.

4.2 College of Architecture and Urban Studies

Within the College of Architecture and Urban Studies there seems to be a clear feeling among some participants that the burden of service and teaching is too high and without fair compensation. Furthermore, that this has an impact on one's ability to produce the requisite research and scholarship toward promotion and tenure. For example, one participant stated: "My service obligation is very high. However, the research and teaching expectations?? have not been adjusted (and I am regularly told that you only get promotion or tenure based on research, and none of the other work I'm doing matters)" While another stated: "As a junior tenure track faculty and as a woman in my program, I have been asked to take on an inordinate amount of service labor. I have had essentially no faculty mentorship since arriving in the program despite repeated requests. My research has been extremely impacted by this labor and I honestly don't know what to do."

Although many seem to understand the requirements for research, other across the survey seem not to at all. In some cases, faculty are not sure what is expected and others feel discouraged to research at all;

"There are no clear expectations set out by my tenure committee. I have no guidelines for expectations nor any departmental mentorship. My department focuses almost entirely on my teaching and do not assess my research and scholarship."

"sometimes this is actively discouraged" for non-tenure track faculty.

Also it should be noted that there are some aspects of research work that were not explicitly included in the survey but that participants at large feel are representative of some of their research outputs, these included the following, which might be summarized as practiced based research: "Sponsored projects," "Speculative and built architecture," "Pieces of Art and Design," "Permanent public artworks (large sculpture & installations)," "Designs"

To summarize, we would say that there is not clarity across the college for what is expected as research, and it seems clear that the requirements for service and teaching are quantitatively out of sync and may impede one's ability to research.

Example comment from a P&T committee member in the School of Visual Arts (SOVA):

"There has been a move to standardize how research (teaching and service less so) is evaluated for tenure — hence the Senate's interest I suspect. All I can say at this point is that [the director] along with the program chairs is developing a series of benchmarks for [the dean] and the CAUS committee. This is particularly difficult in SOVA as you might imagine, with the range from Art History to Studio to Creative Technologies but if I had to state one criteria it is **national reputation** — whether determined by the importance of publications or venues for exhibitions or the number of individuals reached (i.e. number of apps downloaded or hits on a website — criteria not even considered 10 years ago). Thus I think the answer is rapidly evolving making it harder to answer than ever before — but criteria than can be measured quantifiably is definitely on the rise."

4.3 College of Engineering

There were 41 faculty completing all, or part of, the survey. The majority (~70%) were tenuretrack or tenured faculty, so the results are notably skewed towards regular faculty lines. The majority (~65%) filling out the survey were either assistant or associate professors, thus the results are quite representative of our faculty in their formative career periods. Scholarly activities were a significant part of ALL the survey participants, and they identified peer-reviewed publications, presentations, and grant submissions/awards as their primary research outputs. Nearly ALL had reported some prior success in having research grants awarded, more skewed towards external grants rather than internal ones. Based on the fact that the results were skewed towards younger faculty whom are scholarly and grant active, any concerns revealed by the survey should be taken seriously, as they may reflect the future of the COE (and its productivity) for many years to come. It is important to say a few words about how the faculty profiled and evaluated their own research. A strong majority favored Google Scholar and/or ORCID iD to track research impact, but Linkedin to connect and network with colleagues. They favored Google Scholar because it was personally and professionally valuable, but a notable fraction (42%) expected the information to be used at some point in their P&T evaluation. The most common impact metrics identified by the faculty that they relied on were (in order): Journal reputation, Citation count and H-index, number of publications, grant awards, and honors/recognition. Very few used EFARs for profiling. The results may reflect that Engineers prefer statistics based tools for tracking metrics.

4.3.1 How do departments assess research in your college?

Some interesting and representative comments include, "all by the numbers" and "I do not think there's any one metric...though they are useful... in making arguments about merits of scholarship." These indicate that the COE Departments put efforts into trying to make evaluations

based upon something that can be measured and tracked. This is itself good, as it is better than using emotions or no standard.

But, it was also noted "department is very superficial – it chooses to use citation counts, research expenditures, and research proposals as these are easily quantified. However, the true impact is not easily measured." Yes, statistics and metrics can represent a tyranny. But, statistics and metrics are better than emotions or no standard. The important question is how to use a better more informed evaluation metric scheme. It is tough. Certainly we can all agree on the desire to do better in the evaluation of quality.

Ideally, all metrics to assess research should have the goal of assessing quality intellectualism; if we could someday properly assessed quality intellectualism/scholarship, then we would have a good projection of the future ability of that person with regards to their full potential for grantsfunding, publications, originality, and impact. But, we are left with non-ideal assessment methods, which are better than none. One might summarize that for the lack of a better scientific and acceptable way to measure 'quality and impact' that a balanced array of statistics is preferable.

4.3.2 The place of the PIBB in research assessment

Interestingly, the results from the PIBB questions indicate a significant disengagement of the faculty from the process. The responses to the questions were: (1) familiarity, mean score 1.24/5; (2) affect or anticipated affect on types of research projects, 0.97/5; and (3) affect or anticipated affect on how you assess and demonstrate impact of research. 1.35/5. These results demonstrate that the faculty do not view PIBB as anything useful, impactful, or purposeful to them. The faculty are rejecting what it stands for by emotional disengagement. It is not a good sign, in particular given the Administration's insistent push.

There were many comments to Q86, concerning "how do you feel the PIBB should be used in conjunction with research productivity". None of the comments had a good tone about them. What follows are some broad area concerns:

- a) *Numbers not quality*: "I am scared at trying to quantify quality. My impression is that PIBB (and VT budget processing in general) is that they focus on things that are easily quantifiable", implying that they ignore those things that are not easily quantifiable.
- b) *One size does not fit all*: "Depends on person's roles and responsibilities", and "I would rather see incentives based on productivity in other areas of responsibility (teaching, service) rather than research".
- c) *Not related to research:* "small effect on my research", "research-oriented faculty need little incentive", and "not clear how PIBB is related to research".
- d) *Cynicism*: "seems like a thing that administrators use when talking with each other", and not relevant to me", and "There is strong concern that the PIBB will drive us towards a more teaching-based university and our rankings and international reputation will suffer. I also have heard major concerns from junior faculty and many are considering leaving before our rankings drop too far".

e) *Disciplinary*: "I think PIBB might be used to identify faculty members who are not contributing their fair share", and "I imagine this is a much large effect for non-tenured faculty".

The responses highlight the bigger question concerning what role overall the University level has in evaluating quality impact in narrow fields of research. We have departmental P&T level committees to evaluate research creativity and impact at particular times in a faculty member's career, and departments have the authority to begin post-tenure reviews if subsequent productivity declines too much and the person does not perform other alternative functions. Evaluating research and its quality is best left to those with a better understanding of field specific information and impact.

Overall, there exists very little support from the COE faculty for the PIBB. This should be a serious concern for upper management, and is a harbinger of future faculty discontent. In particular, the comment, "major concern from junior faculty and many are considering leaving before rankings drop too far" is both eye-opening and disconcerting. Keep in mind that the COE faculty participants in the survey were mostly assistant and associate level professors. The administration needs to ask the serious question whether the budget model they have devised to incentivize productivity, instead may have serious long-term detrimental effects.

4.3.3 The fairness of the assessment of faculty research

The results from the questions on the fairness of research assessment were very interesting. In particular, the COE faculty felt the Department was most fair (mean=3.21), the College was the next most fair (mean 2.95), and the University level the most unfair (mean=2.80). Clearly, the farther away from the Department, the less confidence the faculty have in fairness in research assessment. This emphasizes the *need for the quality and impact of research to be assessed at the lower levels*, and it highlights the concerns about the PIBB and its potential uses in evaluating research and redistributing financial assets.

There were many responses to Q87, concerning "What problems, if any, do you see with research assessment and how could it be made more fair?" Here are some examples of broad area concerns:

- a) Stop the counting of \$: "Move away from emphasizing research \$ as a measure of output", "VT counts dollars, and occasionally counts papers too, but does not care about quality of research", "Stop the counting! It is misleading, does not value creativity... based more on power than scholarship", and "They care more about research input funding. I do not feel... care enough about research output". The faculty clearly thought overemphasizing the counting of research dollars negatively impacted an environment that favored true scholarship.
- b) Apples and oranges: "It's (assessment of research) all about comparing apples to oranges. There is a lack of confidence in administrators and their ability to make good arguments", "Within my department there are different expectations for research and teaching for different faculty", "Research assessment varies so much by discipline that I doubt that someone in a different discipline can do a good job assessing research in my discipline",

- and "I believe that research assessment should be kept at a broad level, rather than becoming to granular".
- c) Administrative dysfunction: "I have no idea how the college or university assesses my research output... the college and university need not have any role in research assessment", and "Research assessment does not account for overcoming bureaucratic obstacles, such as slow OSP response to awards or long VT legal delays".

4.3.4. Faculty thoughts on salary

The responses to the questions on compensation are very interesting. Clearly, the faculty were quite unhappy with the perceived fairness of their salary (Q70), which had a mean=2.05. The majority of COE faculty (60%) were unaware that presently the average faculty salary at Virginia Tech was in the 35th percentile of its peers, and unaware that sometime ago that the Administration set the Institutional goal that the average faculty salary to be in the 60th percentile of its peers (this target was original set by Charles Steger, as a means to seek Charter Status with the State of Virginia). The survey clearly reveals wide spread discontent and unhappiness.

There were many responses to the questions about faculty salaries that fell into three broad areas of concern:

- a) Fairness of your compensation: "Faculty continually asked to do more, but still paid at the 35th percentile", "delay in correct salary inequalities for decades", "lose allot of good people", "There is salary compression that lowers morale", "peers with my experience earn 50% more", and "VT salary is not competitive".
- b) Awareness that faculty salaries in 35th percentile of peers: "While this was not known to me, it matches my personal experiences. The system is broken and needs fixing", "Never mentioned by management", "I did not know that, inappropriately low", and "those underpaid, relative to others at VT, are in a truly miserable condition".
- c) Awareness that VT faculty salary target is 60th percentile of peers: "This goal is useful, but without a timeline, it is not impactful", "It is great to have a target. When will we reach it?", "Never mentioned by management", and "Why are we so far off from the target after so many years? I've seen too many strong faculty leave for other institutions".

Overall, there is clearly strong dissatisfaction with faculty salaries. It is worse than it appears. The average faculty salary in a Department is even lower than 35%, when one considers that the high paid administrators up the average of the Departments. Furthermore, one needs to consider total compensation. Benefits at Virginia Tech are incredibly low, in particular the low contribution rate to retirement and the lack of retiree healthcare benefits. The total compensation package of the average faculty members must be notably below the bottom 35%, when factoring in these considerations.

It is also worth noting that the average faculty salary has remained at the 35% for the last several decades, even though the University set the goal of reaching the 60% about 15 years ago. No progress has been made, despite the promises. There is money for every Administrative Initiative – Destination Areas, Cross Boundaries, Innovation Campus, Carillion Campus, Buildings, just to name a few – but no money given to make even a small impact upon this long-ago adopted faculty

salary target. We (the faculty) continue to fall behind, but at the same time we are continuously pushed for more and more output in many ways. The combination of the pressure to do more, the PIBB, the directed initiatives, and the low faculty salary are taking its toll on quality of the academic life at Virginia Tech. It will continue to do so, unless there is an 'abrupt about face.'

4.4 College of Liberal Arts and Human Sciences

One hundred and twenty-two (n=122) participants from CLAHS completed the survey. Approximately 83% of participants who reported their current faculty rank were tenure-track or tenured, around 5% were continued appointment-track or continued appointment, 2.5% were collegiate faculty, and less than 1 percent were research faculty or administrative/professional faculty. Around 8% reported they fall under the "other" category, which included visiting assistant professor, professor of practice, or instructor. Forty percent of participants were associate professors, 30% were assistant professors, and 23% were full professors. Approximately 5% were "other" but did not specify their titles. Ninety-seven percent of participants felt they are required to do research/scholarship as part of their jobs.

4.4.1 Departmental assessments of research

As part of the survey, CLAHS participants were asked to describe the approaches used that they or their departments use to assess the impact of research, scholarship, and creative works.

There were 21 comment entries in response to this question.

Seven (n=7) participants stated that the ways impact is assessed is unclear, vague, often based on undisclosed assumptions, whimsy, jealousy, and/or not shared with faculty.

Some programs make assessments based on the findings of external peer reviews, letters, interviews, and opinions of identified specialists in the field. This is preferred to "number crunching.."

In some programs there is disagreement about preferred forms (ie books versus journal articles)

Quantitative metrics were generally described negatively as unreliable, "don't work well," "misguided," etc.

The quality of the publishing house, journal, performance venue, etc. seems to be a commonly accepted assessment category but there is not strong agreement as to the criteria determining quality, identifying assumptions and biases as controversial.

Some identify the actual reach to audiences through publication, social media, podcasts, performance attendees, etc. as an assessment criterion.

The EFAR is used as an assessment tool by some.

4.4.2 The place of the PIBB in research assessment

Participants were asked about the familiarity with the PIBB model, its effects on their research agendas, and their perceptions of how it should be used to assess research productivity.

Using a 5-point scale, individuals from CLAHS indicated they had little familiarity with the model (M = 1.86, SD = 1.51). Individuals also responded that the PIBB has little impact or anticipate that it will have little impact on the type of research projects that they intend to pursue (M = 1.83, SD = 1.75). However, they did perceive that it has or will have a slightly greater impact on the assessment of research output (M = 2.23, SD = 1.76), and qualitative responses indicated that participants have strong opinions about the use of PIBB in research assessment.

When asked how they felt the PIBB should be used in conjunction with research productivity, participants within CLAHS overwhelmingly either 1) expressed that the PIBB model in its current form should not be used for assessing research productivity, or 2) exhibited uncertainty about how the model works and how it could impact them and their departments.

Trepidations Regarding PIBB. Responses from individuals who were skeptical about the inclusion of PIBB in research assessment entailed three primary themes: 1) the perceived "ill-fit" of the model for CLAHS and departments, 2) a focus on quantity over quality, and 3) a shift in priorities.

First, junior and veteran faculty members overwhelmingly expressed concern that the current PIBB model fails to accurately capture all forms of output from members of the college. One participant explained, "Research is not always easy to assess. Our university is diverse. Not all research fits well into a box." Collectively, participants perceived that by focusing on "quantifiable metrics" rather than "non-quantitative indicators of performance," PIBB attempts to oversimply the evaluation process, placing scholars in certain areas of inquiry at a disadvantage. One individual offered, "In my field, the metrics are grossly inaccurate and fail to include large amounts of information" as another specified that "PIBB does not currently have the metrics to accommodate scholarship that is not based on grants and publications."

Other participants, particularly junior faculty, delved deeper into this area, pointing out perceived distinctions between the different approaches to research. One individual commented, "Research in the humanities and social sciences is typically more time-intensive and carried out individually rather than within large research teams, and its 'impact' can only truly be assessed over the long-run rather than within short time-spans, which this budget model seems to favor." Another participant expounded:

"In my field, single-authored book manuscripts are the gold standard, and journal articles are almost always single-authored as well. In terms of output, then, it is very deceiving to assess productivity alongside STEM fields where coauthoring multiple journal articles a year is the norm...I'm concerned that imposing a one-size-fits-all model across the disciplines is going to artificially disadvantage some of Tech's most valuable researchers."

Some participants, many of whom were tenured faculty, elaborated that differences not only exist across colleges, but also among departments and schools within those colleges. One

participant stated, "My field is diverse and interdisciplinary, and I am wary of any pre-set metrics." Because of their concerns with "pre-set metrics" dictated by the university, participants suggested an alternate course of action. As described by one individual, "Departments and schools should be responsible for setting their own criteria in relation to programs at peer institutions and industry/discipline norms."

Second, participants' concerns with the PIBB's focus on "quantifiable metrics" sparked another trepidation in regard to using the model in research assessment, particularly among tenured faculty: an emphasis on quantity over quality. Specifically, many participants argued because the metrics of the model are "unable to judge the quality of publications" along with the number of publications, it is "going to shift attention away from quality to quantity publications" and "award quantity over quality." As a result, participants feared that the PIBB model "will encourage, as so many metrics do, short-term gain over long-term thought and writing" and pressure those with research responsibilities "to crank out sub-par material."

Finally, some participants of all ranks suggested that the application of the PIBB in research assessment would alter research priorities. First, as previously discussed, some individuals envisioned that the PIBB could produce an environment where research is "being 'incentivized' in a particular direction" by prioritizing the pursuit of funding. One participant disclosed that "My greatest fear is that certain areas of intellectual inquiry will be undervalued within my department and at the university overall in regards to hiring and promotion because they do not bring in big grant money." Second, some participants voiced apprehension that the PIBB would increase competition as it "pits colleagues against colleagues and colleges and colleges..." One individual postulated that the model could "create greater stress and disincentivize collaborations by promoting competition between departments (i.e., there's a set amount of money, so we need to fight for it all ourselves)." Lastly, a few participants hypothesized that the PIBB's focus on certain outcomes could potentially hijack their own research trajectories. One individual explained, "What I am currently doing does not get recognition in the PIBB model. If it really is the focus of how everything is evaluated and I decide I have to make changes, to stay here would require me to totally change what and how I do things."

Uncertainty and Unfamiliarity: Along with those who expressed concerns about the role of PIBB in research assessment, other participants of various ranks were unsure about the use of the model in conjunction with research productivity. Many explained their uncertainty stemmed from a lack of familiarity with the model. One participant claimed, "I am still not clear on how the PIBB model will work, so, it is not clear to me how it will impact my work." Another participant noted, "I do not know enough about PIBB to respond." Others attributed their uncertainty to a lack of information. For example, one individual claimed, "Faculty in my unit have not been old any definitive details about the PIBB related to research productivity..." as another stated that "...the Administration stopped engaging faculty members with regard to the PIBB, so its status and substance is entirely unclear." Noting the uncertainty and lack of familiarity, one individual summarized suggestions by offering, "I feel as if the PIBB model should be more deeply explained to the faculty, and the link between research productivity and it [the model] should be made clear."

4.4.3 The fairness of the assessment of faculty research

To assess the extent to which participants perceive the research assessment process as fair, participants were asked to indicate their agreement on a 5-point scale. CLAHS participants expressed that they perceive assessment to be the fairest within their departments (M = 3.27, SD = 1.62), followed by the college (M = 3.14, SD = 1.39). They perceive that evaluation at the university level is the least fair (M = 2.67, SD = 1.53).

In their qualitative responses, participants within CLAHS noted two primary concerns regarding the fairness of research assessment at Virginia Tech: 1) the use of a standardized approach for assessing all disciplines, and 2) expanding expectations. Solutions offered by participants are included with the corresponding theme.

Disciplinary Differences Matter to Assessment. The dominant problem that participants identified was the need for different forms of research assessment dependent on the discipline, paralleling earlier concerns about the PIBB model (see above). One individual noted, "Disciplinary differences need to be recognized and valued at all levels of the university. There is a lot of room for improvement on this issue."

Many participants from CLAHS felt the current research assessment process does, or has the potential to, place individuals in the arts, humanities, and social sciences at a disadvantage. Specifically, these individuals felt that the assessment process often employs a "one-size-fits-all" approach that reflects the "hard sciences" and fails to offer ways to incorporate and evaluate more nuanced forms of output found in individual disciplines. One individual described the concern in detail:

"I am a social scientist, and it seems like research assessment is based on a STEM science standard. I constantly feel that, by the overall university's reckoning, my output does not match expectations. The social science faculty feel like we have to 'translate' our research output and value into language that STEM science-focused evaluators can relate to. This makes me feel like I am continually under pressure to 'prove my value'..."

Several participants largely attributed this perception to the current method used to capture and calculate research productivity. One participant explained:

"While, ultimately, I feel that my work has been assessed 'fairly,' I would like to see the university embrace the diversity in research that exists across our comprehensive campus. The current EFAR system appears to favor the hard sciences and relegates the arts to what can sometimes feel like sitting at the 'kiddie' table. Those of us in the arts engage in valid research; it is just that our research does not easily fit into the ways this university gauges productivity."

Also reflecting concerns about the PIBB model, many individuals emphasized a need to balance quantitative metrics with qualitative review measures, which they felt would permit a more holistic overview of a scholar's contributions to their field. One participant explained, "Applying quantitative assessment to everything is frustrating because quality is important here too."

Finally, some participants perceived that the current practices are fair but were nervous about

future forms of assessment. One individual claimed, "The system is about as fair as it can be. However, moving to systems such as Academic Analytics or any other metric-based approach undermines the fairness."

A few participants offered solutions to address their grievances. Some participants wanted to reduce or eliminate the amount of cross-disciplinary evaluation procedures. For example, one individual stated that "Get researchers to do the assessing, particularly researchers from outside STEM." However, others suggested that perhaps the best solution would not be to sever these relationships but to promote understanding of the expectations for each academic area. One participant elaborated, "There is a general lack of understanding across the university between the 'hard' science faculty (engineering, especially) and the humanities and social sciences. More discussion between the groups could help."

The most prevalent solution offered by participants was to allow departments and, to a certain degree, colleges to maintain authority in identifying relevant measures of success. One participant proposed that "Impact factors should be identified and judged by peers in each discipline. Comparing the value of research in the creative arts and humanities to those in the sciences, engineering, or architecture, is like comparing apples to oranges..." Another participant advocated, "Recommendations of departments and colleges should be respected by higher administration." However, participants articulated that a department's standards should be the central factor in the process as "Decisions about P&T, productivity, and worthiness should ABSOLUTELY remain at the department level, with the College and University ONLY making certain the P&T process was fairly conducted by the department..."

Expanding Expectations. Finally, several individuals discussed their growing number of responsibilities and the impact of these new duties on their research productivity and assessment. Specifically, participants expressed that, with regard to assessment, the standards for research remain static while expectations for other areas (i.e., service) continue to increase. One participant described this imbalance: "There is a significant administrative/service burden on some faculty, which decreases our research output, but there is no recognition of or remediation of that burden...Research takes time; increasingly our time is taken up with other expectations at the institution." Another echoed this sentiment, "Expectations are made that are unrealistic relative to the additional load that professors have to carry for mentoring and dept service." Participants added that in addition to these extra responsibilities, these additional tasks are often not reflected in individual evaluations. For example, one individual explained, "I am asked to do a lot that does not count for anything but that is important to the stated goals of the university."

4.4.4 Faculty thoughts on salary

Participants were asked to assess whether or not they felt they are fairly compensated for their research responsibilities in comparison to their colleagues at Virginia Tech SCHEV designated peer institutions. Using a 5-point scale, participants in CLAHS overwhelmingly indicated that they feel they unfairly compensated for their responsibilities in comparison to peers (M = 1.32, SD = 1.34). When asked if they were aware that faculty salaries at Virginia Tech are currently in the 35th percentile in comparison to Virginia Tech's SCHEV designated peer institutions, approximately 45 percent (n = 65) indicated they were aware, and 37 percent (n = 53) indicated

they were not aware.

The sentiment of perceived pay inadequacy for the amount of required work dominated the participants' comments about faculty salary. This seemed to be true for veteran scholars as well as junior faculty, both of whom said they were keenly aware of the discrepancies. As one faculty member noted:

My initial contract was significantly lower than starting salaries in my field at SCHEV peers, to the point that colleagues and mentors in my discipline were alarmed by it. With the addition of salary compression, and the only option to negotiate a raise through obtaining a counter-offer, I know my labor is undervalued and that VT will not be competitive when I obtain a counter-offer--or, if VT does make a competitive offer to retain me, that the institution has been shortchanging me during my years of service.

The non-competitive salaries at Virginia Tech, as scores of participants noted, may have consequences that transcend personal frustration. Concerns around high cost of living and lack of competitiveness on the job market – two issues exacerbated by low salaries at Virginia Tech – figured prominently in the responses. Some participants expressed worry that low compensation might affect the caliber of scholars that Virginia Tech is able to recruit and retain.

When we last checked, in a department-to-department comparison, Tech was undercompensating by approximately \$10,000 (e.g., \$60,0000 to \$70,000). There is also considerable disparity within the university. The university has long touted Blacksburg's lower cost of living, as a tradeoff for lower salaries. Yet housing prices in Blacksburg are significantly inflated, owing to the paucity of single-family homes, with a negative impact on the overall cost-of-living index. Compounding this shortfall is the lack of adequate childcare, especially when the public schools close for snow days – colloquially known as a 'parent tax.' There is a high degree of turnover at Tech, and we completely understand why.

In addition to the overwhelming dissatisfaction with salaries, some participants said that annual raises were insignificant or even absent. In the words of one participant: "The (purported) TOP annual merit raise, which I received multiple years in a row, does not even compensate for inflation. This is appalling and iniquitous. Faculty compensation, especially in the Arts and Human Sciences, causes huge retention and climate issues at VT."

A few mentioned what they perceived as an unfair system of raises, which, in their experiences, rewards those faculty members who over- and under-produce equally. One person advocated for change: "While it may be that some academic units do a fair job of determining merit raises, this is not for many units. There needs to be some kind of change put in place (or oversight) so that highly productive scholars are awarded merit raises that reflect their achievements. Currently those who are highly productive too often receive merit raises that are similar to those whose productivity is average or slightly above average."

Still some mentioned that in addition to salaries and merit raises, additional resources were also lacking. This sentiment, however, was not as prevalent as the first two. One participant summed up the situation in the following way: "It's a well-known fact that Virginia Tech faculty have a lower pay rate than faculty at most of our peer institutions, accounting for cost of living. We are

expected to match the research productivity of faculty at peer institutions, but are compensated much less, in terms of both salary and resources (travel money, funds for conference expenses, RA/TA support, etc."

The majority of comments regarding Virginia Tech faculty salaries being in the 35th percentile in comparison to SCHEV peers revealed three dominant themes: resignation, disappointment and anger. As one participant put it, "The University's current goal is to reach the 60th percentile of faculty salaries at peer institutions. Certainly some of those schools are in high cost-of-living locales; many are not, though. We should already BE at 60th percentile and reaching instead for 75 or 80."

Participants expressed similar sentiments when asked about Virginia Tech's target to have the overall faculty average salary in the 60th percentile of the average salaries of the SCHEV peers. What almost all participants wanted to know was a specific plan of action that would accomplish this goal. One participant shared: "Big deal. It will never happen, and the very best faculty will never come close to 60th percentile for non-STEM departments. A student can graduate from VT without ever taking a course in English or a foreign language. VT is really a Tech college, not a university."

Quite a few participants, including those with long tenure at the university, expressed doubt about Virginia Tech ever reaching the 60th percentile goal. As one of them said: "This promise is hot air with no discernible plan to get there. I would like the state and VT to make a joint public plan about how to get to that, with intermediate goals and a timeline. Consider also capital campaign and prioritizing this in advancement -- some other universities have had success highlighting the recruitment and retention of top talent with donors."

4.4.5 Additional feedback

In addition to the above areas, participants also offered feedback on the allocation of their time and other areas, as described below.

Time Allocation. Regarding time allocation, participants in CLAHS shared 1) how they are expected to spend their time, 2) how they actually spend their time, and 3) how time allocation impacts research. First, participants were asked what percentages of their time were assigned to select categories according to their official job descriptions.

Approximately 95 percent of participants (n = 116) reported that they have teaching responsibilities, followed by service (n = 115, 94%) research (n = 113, 92%), and 'other' duties (n = 8, 7%). participants indicated that they, on average, are expected to dedicate around 41.5% (M = 41.52, SD = 12.66) of their time to research, 41.5% (M = 41.49, SD = 15.8) to teaching, and approximately 21% to service (M = 20.78, SD = 14.94), according to their job descriptions. These responses reflect an institutional allocation of time of approximately 40:40:20. Eight individuals also indicated that they spend an average of 25% (M = 25.38, SD = 32.16) of their time in other areas, such as administration, advising, and community outreach.

There were only three written comments from participants elaborating on their expected time allocation:

- "33,33,33" was what I was told when I started at VT, 5 years ago. Recently, I was told, 'That's changed.' The 'new' percentages, however, were not specified."
- "...my contract says teaching assignment. While nothing else is on the contract other expectations were held as well which when I resisted was met with, oh well."
- "I don't have an official job description."

Second, participants were asked to share what percentage of their work time they actually spend on each category. Participants expressed that teaching takes up most of their time, reporting that they spend approximately 48% (M = 47.88, SD = 22.5) of their time in this area, followed by 'other' duties, such as administration, advising, and community engagement (M = 41.08, SD = 31.15); research (M = 36.2, SD = 20.3); and service (M = 34.45, M = 23.32). The average amounts of time reported for each area reflect a personal allocation of time of approximately 36:48:34, which add up to 118%, and is inconsistent with the institution's allocations of time. It also suggests that individuals are dedicating fewer hours than expected to research and spending more time than expected on teaching, service, and 'other' duties such as administration and advising. There were no written comments about this question.

Finally, participants were asked to provide feedback on their time allocation demands and how these demands affect research output. There were 46 comment entries in response to this question. 16 stated that research output suffers based on several factors, including

- Teaching and service dominates in actual practice
- Administrative and advising demands
- Too many service/outreach demands not enough time for research
- Good teaching takes more time than institutional time assignments allow
- Research is done in "free time" weekends, summer, etc.
- Day to day presence of students, committee meetings, colleague interactions dominate
- Instability of faculty and support personnel
- Multiple changes of unit, college, and university leadership and new jargon has disoriented priorities
- Pathways assessment processes waste time and cut directly into research time
- Lack of sufficient resources for research travel

16 stated that faculty suffers under current time allocations. Factors identified include

- "I often ignore what I as supposed to do to my professional and monetary detriment"
- "...almost all of my research productivity is on unpaid weekends and over the unpaid summer, when I cram to make up for lost time."
- Actual circumstances force inequitable service assignments
- "...demands on our time add up to more than 100%"
- the extra time that scholarship takes "comes out of my personal time (weekends, weeknights, holidays)."
- In practice the college "pays little attention to the [time allocation] ratio, expecting far more than can be achieved in a sane and humane 'work week."
- "...currently serving in an administrative position that comes with a teaching load reduction, but no official modification of duties for purposes of evaluation. So I've signed up for a lot of service, which is definitely eating my time. It would be helpful not to be

- evaluated on the same standards as other colleagues for teaching and research output while I'm in this position."
- "Colleagues have fled and are leaving still. The number of searches and misguided staffing visions between our current Dean and our reality is staggering."
- "The intensity of student interaction in the arts and humanities is not accounted for by the university's metrics."
- "An unnerving number of faculty from departments have told me that they are working themselves to the point of physical illness and mental health crises."

Several perceive that the University's aspiration as an R1 institution is in conflict with demand for hands-on education for undergraduates: "Good teaching takes time, and is immediately necessary. This means research often has to wait"; "Teaching, done competently, is very time-consuming."

Service is "through the roof" for junior faculty, in some units, and overall faculty in others:

- Baby boomer retirements and no senior hiring forces junior faculty into disproportionate service assignments.
- Some units "place unreasonable teaching and service expectations on pretenure faculty."
- "Faculty expertise is wasted on bureaucratic tasks in my college."
- "In the national capital region (NCR), it is not uncommon that faculty have greater service responsibilities because there are relatively few faculty for programs compared to larger departments in Blacksburg."
- "Fewer course releases for extraordinary service assignments are among the many things eating into the time that I would like to spend working on research."
- "I am swamped with the demands of service and highly committed to providing an outstanding classroom experience of rigor and compassion to my students that research productivity slips."
- "Service loads generally don't take into account service outside the university to the profession and are rarely recognized for the amount of time they take away from other parts of our duties."
- "Because of the turmoil in our college (terrible past Deans, the disruption caused by the previous Provost) I am working at a maximum. Colleagues have fled and are leaving still. The number of searches and misguided staffing visions between our current Dean and our reality is staggering."

Many identify the constant demand to change software, platforms, and institutional systems as an unacknowledged time drain:

- "The administration at VT treats faculty time like dirt, constantly changing software, platforms, and reporting systems (as if switching over and over is "free") and coming up with huge new tasks through Pathways, PIBB, Destination Areas, and other programs without freeing up time in other ways."
- "The administrative burdens imposed by eFARS, and in the future PIBB, seem to have not been considered. Even the timing of the eFARS thing is the worst possible for teachers."
- "The trouble is that we are burdened with additional tasks all the time. The eFars are one example. Changing from Blackboard, then to Scholar, then to Canvas, and now talk of

- changing again (all within a 12 year period) is simply time sucked away from our formal responsibilities. And the enormous amount of time to learn about each new teaching system is NOT accounted for in our evaluations."
- "The Pathways Assessment is an example of yet another meaningless task I am required to do each semester which has no impact on the effectiveness of my teaching and further takes away from my time doing research."
- Additional Comments. Participants were also asked to provide any additional comments about the topics covered in the survey. In their responses, participants focused on 1) an increase in administrative duties, 2) research metrics, 3) possible workshops, 4) compensation inequities, 5) the PIBB model, and 6) teaching. There were 12 comment entries in response to this question.
 - An Increase in Administrative Personnel = An Increase in Faculty Burdens: "A related note: the increase in administrators over the years should lead to a reduction in faculty administrative work, as it is offloaded to such administrators, however the opposite is true." "Administrators add to rather than decreasing the administrative burdens on faculty by generating new concerns, requirements, and reporting activities for faculty to fulfill. This takes time away from our research."
 - Research Metrics: "No time, nor interest in workshops on research metrics"; "Research metrics are not relevant to the actual research done"; "Many of the metrics assessment tools do not accurately measure the impact of research within Humanities fields. I would like to see more support of promoting Humanities research."
 - Possible Workshops and/or Topics of Interest: ""Age bias and disability bias in management might also be considered as factors in the above and need workshops as well"; "Have an honest conversation about faculty turn-over, which hurts morale. Find out why and address it": "...while the university uses the dual-career program to attract faculty, in practice very few couples who are hired through the program survive, that is, without one member of the couple having to accept a lower position, as a staff member or as another sort of non-TT employee."
 - PIBB: "I think the PIBB model is terrible. How the administration thinks we can marry PIBB with Beyond Boundaries and Pathways is beyond me. How can you simultaneously incentivize building walls and breaking them down? PIBB rewards departments creating their own fiefdoms and "capturing" majors at the expense of other programs. It encourages us to treat major choice as a zero-sum game. At the same time, we are supposed to be creating pathways minors and going "beyond boundaries" to collaborate with colleagues across disciplines. But in a PIBB model, why would I do this?"

Teaching: "Learning happens best in supportive environments, not giant auditoriums."

4.5 College of Natural Resources and Environment

4.5.1 Response

Twelve (n=12) faculty members responded to the survey. These faculty were tenure-track, tenured, research, or collegiate faculty. No professional faculty responded. Ranks of Assistant, Associate, and Full Professor responded. As of Fall 2018, CNRE employs 75 tenured and tenure-track faculty; 102 non-tenure-track faculty; and 13 administrative/professional faculty (Virginia Tech Institutional Research, 2019). Thus, the response rate for this survey in CNRE was 6%. We urge readers to keep this low response rate and the very small sample size in mind when interpreting these results.

4.5.2 Results

How Departments in CNRE Assess Research Impact. Only two (n=2) participants wrote in responses related to how departments assess impact, noting that narrative explanations from the individual and/or external letters play an important role beyond typical metrics. Of the research impact options listed in the survey, journal metrics, citation counts to individual works, and journal reputations were research impact metrics that more than three-quarters (n>9) of participants used or relied on. More than half of participants (n>6) also relied on number of publications, grant award amount, grant proposals submitted, author h-index, and awards/recognitions/honors. More than half of the participants (n>6) described journal metrics, number of publications, and grant award amounts as the way they are expected to assess their research impact. Their responses to what they find personally or professionally valuable differed somewhat. Journal reputation and citation counts to individual works were the only two metrics that more than half of the participant agreed were valuable.

4.5.3 Place of PIBB in Research Assessment

Seven of twelve (n=12) participants commented on how they feel the PIBB should be used in conjunction with research productivity. Three of these responses explained that the participant did not have any ideas, in some cases because they did not know enough about the PIBB. Two (n=2) participants suggested that the PIBB should be tied to annual review or promotion and tenure requirements. In contrast, two other participants stated they did not believe the PIBB should be used because research productivity is "difficult to quantify", varies by year, and varies by department. Another participant explained s/he is skeptical s/he will see any benefit from the PIBB approach being tied to research productivity; as the system stands money that comes does not lead to more TAs, funding or facilities for the PIs.

4.5.4 Fairness of research assessment

Five (n=5) of ten participants felt the department and college fairly assesses their research output (giving 5 out of 5 on the Likert scale). The other five participants were relatively evenly spread among values between 0 and 4 on the Likert scale. Eight (n=8) participants provided comments on the fairness of research. The comments displayed more issues with the assessment than reported on the Likert scale. The most common ideas expressed were associated with the

difficulty comparing faculty research outputs across a college as diverse as CNRE. There is concern that metrics implemented at the university-level will not fairly capture differences among disciplines and departments in CNRE (importantly, multiple disciplines can exist within a single department within CNRE). As an example, there is concern that a "productivity unit" will favor the faculty with access to a Ph.D. program (not all departments have a Ph.D. program) and with research programs that do not require extensive field work. The second most common response was that the criteria for evaluation of research productivity was not clear to faculty.

4.5.5 Issues on salaries

In general, CNRE faculty reported that they were not fairly compensated for research responsibilities. Eight (n=8) of eleven participants report values less than 2 of 5 on the Likert scale for fairness of compensation. All but one comment (6 of 7) reported some degree of dissatisfaction with the compensation, either with salary or benefits. These included concerns that the level of research production demanded is more than peer institutions but the salary is less. Interestingly, an issue that was reported across the questions on fairness of research assessment and salaries was the concern that research productivity was not tied to the raise structure.

4.5.6 General perceptions

The 12 faculty who responded to the survey are generally happy with the department assessment but do not feel that their productivity is assessed as fairly at the university-scale. There are varied ideas on how the PIBB should be tied to assessment, including that it should not be connected. participants also believed they are underpaid relative to peer institutions and relative to demands for research.

4.6 College of Science

There were a total of 25 participants from the College of Science, all of whom were tenured or tenure-track faculty. Based on the Fall 2018 "Headcount by College" IR report, there were 240 tenured and tenure-track faculty and, so, this response rate is 10.4%. There were no responses from any other category of faculty. All of the faculty from COS who responded indicated that research and scholarship was a part of their duties. The numerical parts of the survey show that almost all types of scholarly output are used by departments in the COS. The following summarize comments concerning open-ended questions posed in the survey.

4.6.1 How should the PIBB be used in conjunction with research productivity?

The majority of sentiments indicated that research metrics are flawed and PIBB should not use them. One comment suggested that use in PIBB would drive faculty to trendy areas. Also, the fact that money is sent to Colleges and NOT coupled to PIBB is not a fair use. The minority would like to see research OUTPUT coupled to salary increases.

4.6.2 Problems with research assessment

The majority view is that research assessment is disproportionately based on extramural funding. Should be based on outputs and based on a long-term view of an individual's scholarship. Other comments: impact factor of journals is a poor assessment. Objective criteria differ a lot between departments, disciplines and sub-disciplines. Detail collected by departments is lost in upper administration.

4.6.3 Fairness of Compensation

Given our average salary compared to peers, we are NOT fairly compensated. Most felt they were not compensated compared to peers and we ask a LOT more service than other universities. Most felt there was a lot of words concerning raising our peer ranking with no progress. Many questioned how cost-of-living is factored in.

4.6.4 Faculty thoughts on salary

In terms of salary, the word "pathetic" showed up multiple times. The other sentiment that was consistent across many areas is that we are asked to do a lot of things that do NOT enter into evaluations, especially service. Most felt that faculty loads were disproportionately high compared with our salaries. Many commented that their effort adds up to more than 100% deliberately. "Not enough hours in a week".

4.7 College of Veterinary Medicine

There were only two written responses from this College. They are included in the university level comments.

4.8 Pamplin College of Business

There were a total of 22 Pamplin participants, of which 19 were tenure track (TT) and 3 were of other ranks. Based on a total of 95 TT faculty, this represents a 20% response rate from Pamplin TT faculty. participants were evenly split among Asst., Assoc., and Full Professor ranks. 100% felt they are required to do research/scholarship as part of their jobs.

4.8.1 PIBB [Qs 63, 64, 66]

If the Likert/sliding scale was

- 0 Not at all
- 1 A little
- 2 A moderate amount
- 3 Some
- 4 A great deal

How familiar? Mean = 1.05, a little Affect types of research pursued? mean = 0.81, not much

Affect how you assess/demo research impact? = 1.0, a little

Business Faculty responded to the PIBB questions re familiarity and affect with "a little."

Q86 re how should PIBB be used re research productivity? 1/3 of the Business Faculty responding survey, made comments.

71% remarked that the PIBB should NOT be used in conjunction with research productivity. A repeated comment was that **disciplines are too different** to use on type of assessment tool.

29% were not knowledgeable about PIBB.

4.8.2 Fairness of Assessing Research

Qs 67-69 "My department/college/university fairly assesses my research output."

If the Likert/sliding scale is

- 1 Strongly Disagree
- 2 Disagree
- 3 Neutral
- 4 Agree
- 5 Strongly Agree

Department assessment: mean = 2.35, about half agreed, half disagreed **College** assessment: mean: 1.83, one third agreed, about half disagreed **University** Assessment: mean: 2.46, about two thirds agreed, >one third disagreed

Q87 Problems with research assessment (14 comments)

Half identified the negative impact of having a limited number of prescribed journals where faculty are required to publish, as identified by a "small cabal" as premier publications. This lack of transparency also "fails to recognize creative scholarship." Nearly half of the comments identified the need to recognize differences among disciplines

4.8.3 Fairness of compensation

Q70 Fairness of compensation compared to colleagues at SCHEV designated peer institutions

If the Likert/sliding scale is:

- 1 Strongly Disagree
- 2 Disagree
- 3 Neutral
- 4 Agree
- 5 Strongly Agree

• Mean score: 1.47. 60% of the Business faculty do not feel fairly compensated, while 20% do.

Q89 the fairness of one's compensation. 8 comments

Nearly three-fourths commented that compensation suffers from "compression," "inversion," and "disparity." One-fourth identified the negative impact this has on students.

4.8.4 Time allocations and effect on research & impact

Q71-65% of the Business faculty were not aware that VT salaries are in the 35^{th} percentile.

Q72 – 84% of the Business faculty were not aware of the 60th percentile target.

Q[73] – Percentage of time assigned to each category

• **Research:** mean = 42.24

• **Teaching:** mean = 36.05

• **Service:** mean = 20.29

Q74 – Percentage of time actually spent on each category

• **Research:** mean = 42.30

• **Teaching:** mean = 37.65

• **Service:** mean = 28.35

Q88 – **Nearly 40%** of the survey participants from the Business faculty made comments on **time allocation demands** and how they **adversely affect research outputs or impact**. Three-fourths of the comments highlighted teaching, half highlighted service, and more than a third highlighted publishing—all taking away from time for research. "I keep being asked to do more and more with nothing being taken off my plate."

4.9 University Libraries

~36% (33/92) of library faculty participated. Of those who provided information, 80% are under 45, 66% are women. 55% have or are on track for CA and 78% are Asst Prof.

4.9.1 PIBB [Qs 63, 64, 66]

If the Likert/sliding scale was

- 0 Not at all
- 1 A little
- 2 A moderate amount
- 3 Some
- 4 A great deal
- How familiar? mean: 1.77 = a little
- Affect types of research pursued? mean: 2.15 = a moderate amount

• Affect how you assess/demo research impact? mean: 2.96 = some

Librarians responded to the PIBB questions re familiarity and affect with "some" to "a little."

Q86 re how should PIBB be used re research productivity? The 15 comments were overwhelmingly negative with a few others mentioning "cautious."

Nearly half of the comments promoted service to practitioners and students and assessing quality over quantity.

All of the PIBB feels like a square peg and a round hole. To speak specifically to this, quantifying connections is hard, and much of the work we do (or should do) as a land grant has to do with outreach and applied aspects of the work. There is little in the way of metrics (even with altmetrics) to show how important our work is to practitioners. It can be research that makes something happen; or research that prevents something from happening (which is then not visible).

Our research can create more uptime and seamless work for other people. How can we show our "research productivity" to then link it to PIBB? I have yet to see anything I trust in how things are so linked currently.

One third mentioned trust, peril and trendy. "A new way to commodify faculty work."

Another third mentioned the desire for equal distribution of resources, that the PIBB is aimed too narrowly, and there are "wildly different output expectations per school/unit." "It should be used as a general measure for how departments and colleges are doing in different areas but not as a tool for making budget and funding decisions."

4.9.2 Fairness of Assessing Research

"My department/college/university fairly assesses my research output," Qs 67-69

If the Likert/sliding scale is

- 1 Strongly Disagree
- 2 Disagree
- 3 Neutral
- 4 Agree
- 5 Strongly Agree

Dept. assessment: mean: 3.38
College assessment: mean: 3.22
University Assessment: mean: 2.91

Over half felt the department and college level (i.e., library) assessment was more fair than not, and about one quarter felt it was more unfair than not. Librarians were fairly evenly split in their opinions that research assessment at the university level was fairer or less fair.

Overall, the mean declined as the level increased, suggesting that there is less feeling of fairness on the university level compared to the college and department level. The department level had the highest mean score and the largest number of participants who answered "Strongly Agree."

Q87 Problems with research assessment

Over half the 11 librarians commented that assessment should not be focused on research, but on the impact of service and teaching. Over one third felt that departments and their faculty are too individual, so the one-size-fits-all measurement of research is not appropriate. Another third favored qualitative over quantitative measurements.

4.9.3 Fairness of compensation

Q70 Fairness of compensation compared to colleagues at SCHEV designated peer institutions

If the Likert/sliding scale is:

- 1 Strongly Disagree
- 2 Disagree
- 3 Neutral
- 4 Agree
- 5 Strongly Agree
- Mean score: 1.80; Mode: 3

More than one-quarter agreed that they were fairly compensated, but almost half disagreed.

Q89 comments on the fairness of one's compensation

60% of the librarians didn't know that VT was in 35th percentile compared to SCHEV peers. 65% were not aware of the 60th percentile target. (Q71-72)

The two-thirds of the 9 who commented feel strongly that they are underpaid. Some provided examples of inversion, such as lack of cost-of-living raises and race/gender inequities among the causes.

4.9.4 Time allocations and effect on research & impact

Q72 – Percentage of time assigned to each category

Research: mean: 15.32%Teaching: mean: 23.91%

• **Service:** mean: 27.29%

Q74 – Percentage of time *actually* spent on each category

Research: mean: 16.29%
Teaching: mean: 29.52%
Service: mean: 31.94%

Half of participants in the optional text-based responses (10 out of 20) responded that they also do administrative and/or management duties. Several also responded that they do program coordination and consultation duties. Since the library profession is service-oriented, it is not surprising that "Service" received the highest percentage, though this is likely not only related to service in terms of committees but probably related more to job duties and service to the community at Virginia Tech. Overall, all the percentages were higher for actual time spent compared to time allocations assigned.

Q88 – comments on time allocation demands and how they affect research outputs or their impact

Nearly half the librarians feel they are adequately supported in their research endeavors and nearly half feel like there are not enough hours in the day to carry out the research they should be doing in addition to their other faculty responsibilities. More than one-quarter feel that service suffers in order to devote time to research.

Q66 – Interest in services, workshops, instruction

At least half of all participants were interested in workshops, instructions, or services related to research impact and assessment education. The categories with the most interest were "Qualitative research assessment" and "Tracking accurate metrics of my research assessment."

Q91 There was only one general comment

Exciting results:

76% of the librarians responding to Q92 have used open licenses.

67% have shared open access articles, etc.

24% open data

18% open source

5.0 APPENDICES

5.1 Appendix A

Faculty Senate Committee on Assessment of Faculty Research, Spring 2019

- Jim A. Kuypers, Professor of Communication, Chair
- James H. Westwood, Professor of Plant and Environmental Sciences, College of Agriculture and Life Sciences
- Eric Wong, John W. Hancock Professor of Animal and Poultry Sciences, College of Agriculture and Life Sciences
- Jonas Houptman, Assistant Professor of Industrial Design, College of Architecture and Urban Studies
- Kathleen Meany, Assistant Professor of Graphics Design, School of Visual Arts, College of Architecture and Urban Studies
- Ben Knapp, Director of the Institute for Creativity, Arts, and Technology (ICAT) and Professor of Computer Science, College of Engineering
- Dwight D. Viehland, Jack E. Cowling Professor of Engineering, College of Engineering
- Bob Hicok, Professor of English, College of Liberal Arts and Human Sciences
- Robert H. Leonard, Professor of Theatre, College of Liberal Arts and Human Sciences
- Chelsea Woods, Assistant Professor of Communication, College of Liberal Arts and Human Sciences
- Natalia Mielczarek, Assistant Professor of Communication, College of Liberal Arts and Human Sciences
- Ashley Dayer, Assistant Professor of Fish and Wildlife Conservation, College of Natural Resources and Environment
- Quinn Thomas, Assistant Professor of Ecology, College of Natural Resources and Environment
- Joseph Merola, Professor of Inorganic Chemistry, College of Science
- Kerry J. Redican, Professor of Public Health, College of Veterinary Medicine
- Gail McMillan, Professor and Director Scholarly Communication, University Libraries
- Rachel Miles, Research Impact Librarian, University Libraries

Virginia Pannabecker, Research Collaboration & Engagement Librarian, University Libraries

Nathaniel D. Porter, Social Science Data Consultant, University Libraries (Ex officio)

Amanda B. MacDonald, Teaching & Learning Engagement Librarian, University Libraries (Ex officio)

5.2 Appendix B

Faculty Senate and University Libraries Faculty Research Assessment Survey

Start of Block: Introduction

01

Faculty Senate and University Libraries Faculty Research Assessment Survey

As a faculty member at Virginia Tech, you are invited to participate in an online survey created by the Faculty Senate and the University Libraries. The goal of this survey is to gain insight into the types of research being conducted on and off campus, assessment of such research, and the metrics being used to show impact. The survey also addresses your perception of faculty salaries at Virginia Tech relative to peer institutions, and your perception of your time commitments relative to your position requirements.

The Faculty Senate will use the data to make policy recommendations to the University and Board of Visitors regarding research assessment and faculty salaries. Additionally, University Libraries plan to use the results of the data to improve resources and services offered to faculty to support their research needs. There is a possible use of aggregated survey results, with no individual identifying characteristics, for dissemination beyond VT. This could take the form of presentations to Richmond policy makers, or conference presentation or publication.

This is an anonymous and voluntary survey. Individual data from this form will not be shared outside the research team. Aggregated results and text responses will be shared with appropriate internal stakeholders, and possibly via dissemination beyond VT, with identifiable groups of less than five respondents combined or removed to minimize risk of identification of participants. If you are still concerned about personal identifiability, you may choose not to respond to any questions of concern.

If you wish to continue participating in this study beyond this survey, you may leave your name and email address via a confidential link at the end of this survey. This confidential link will take you to a separate form that is outside of this survey. Survey responses will remain anonymous. Name/email will only be collected through the external form. You may decide to not complete this survey. You may exit this survey at any time.

For technical issues, please contact <u>Nathaniel D. Porter</u> (University Libraries). For human subjects concerns, please contact the IRB. For any other concerns about the survey, please contact <u>Jim A. Kuypers</u> (Chair, Faculty Senate Research Assessment Committee).

If you would like to continue, please indicate your consent to participate below.

Thank you for your time and attention!
O I consent (1)
O I do not consent (2)
Skip To: End of Survey If Faculty Senate and University Libraries Faculty Research Assessment Survey As a faculty member = I do not consent
Q2 Which type of faculty best describes you?
O Tenure-track or Tenured (1)
O Continued Appointment-track or Continued Appointment (2)
Research (3)
Collegiate (4)
O Administrative and Professional Faculty (5)
Other (professors of practice, clinical faculty, etc.) - please specify (6)

If Which type of faculty best describes you? = Tenure-track or Tenured

Or Which type of faculty best describes you? = Continued Appointment-track or Continued Appointment

85 What is your current faculty rank?	
O Assistant Professor (3)	
O Associate Professor (2)	
O Professor (1)	
O Distinguished Professor (4)	
O Professor Emeritus/Emerita (5)	
Other - please specify (6)	-
nge Break	

Q3 Are research, creative, and/or scholarly activities a part of your official responsibilities in your faculty role at Virginia Tech?

Note: research, creative, and scholarly activities can include but are not limited to departmental research for the purpose of enriching or enhancing teaching, scholarship, and/or to better understand the faculty member's discipline; core research through the Instructional division and Virginia Cooperative Extension/Agricultural Experiment Station; research sponsored by state and federal agencies, corporations, and private foundations; classified research; artistic works, such as musical and dramatic performances, compositions, screenplays, novels, visual artistic works, and so on.

such as musical and dramatic performances, compositions, screenplays, novels, visual artistic works, and so on.
O Yes (1)
O No (2)
Skip To: End of Block If Are research, creative, and/or scholarly activities a part of your official responsibilities in y = Yes
Q4 Do you produce research outputs as a result of your research activities (e.g., publications, conference papers, presentations, performances, artwork, etc.)?
O Yes (1)
O No (2)
Skip To: End of Survey If Do you produce research outputs as a result of your research activities (e.g., publications, conf = No
End of Block: Introduction

Start of Block: Research

73

Q16 What types of research outputs do you produce as a result of your research, scholarly and/or creative activities at Virginia Tech?

	I currently produce these or have produced them (2)	I plan to produce these in the future (3)
Publications (e.g., books, journal articles, book chapters, monographs, etc.) (1)		
Presentations or lectures (e.g., presentations at professional and/or scientific conferences, lectures at symposiums, etc.) (2)		
Creative, fine or performing arts (e.g., fiction, poetry, compositions, performances, visual arts, etc.) (6)		
Design-based products and services (8)		
Patents as a result of inventions / discoveries (3)		
Grants submitted/awarded (4)		
Other - please specify (7)		

Display This Question:

If What types of research outputs do you produce as a result of your research, scholarly and/or crea... = Publications (e.g., books, journal articles, book chapters, monographs, etc.) [I currently produce these or have produced them]

Q17 Which types of publications do you <i>currently produce or have you produced</i> in the past as a result of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply.
Books authored (1)
Book chapters (2)
Books edited (3)
Textbooks authored or edited (4)
Other published instructional materials (17)
Special journal issues edited (5)
OArticles or critical essays in peer-reviewed journals (6)
Translations (7)
Prefaces, introductions, catalog statements, etc. (8)
Entries in reference works (9)
Published conference papers, abstracts or proceedings (10)
Published reviews of published works by others (11)
Newspaper or magazine articles (12)
Non-peer-reviewed scholarship (13)
Data, software or digital code (14)
Digital scholarship not captured by other categories (15)
Other - please specify (16)

If What types of research outputs do you produce as a result of your research, scholarly and/or crea... = Publications (e.g., books, journal articles, book chapters, monographs, etc.) [I plan to produce these in the future]

Carry Forward All Choices - Displayed & Hidden from "Which types of publications do you currently produce or have you produced in the past as a result of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply."



Q80 Which types of publications do you <i>plan to produce</i> as a part of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply.
Books authored (1)
Book chapters (2)
Books edited (3)
Textbooks authored or edited (4)
Other published instructional materials (5)
Special journal issues edited (6)
Articles or critical essays in peer-reviewed journals (7)
Translations (8)
Prefaces, introductions, catalog statements, etc. (9)
Entries in reference works (10)
Published conference papers, abstracts or proceedings (11)
Published reviews of published works by others (12)
Newspaper or magazine articles (13)
Non-peer-reviewed scholarship (14)
Data, software or digital code (15)
Digital scholarship not captured by other categories (16)
Other - please specify (17)

If What types of research outputs do you produce as a result of your research, scholarly and/or crea... = Presentations or lectures (e.g., presentations at professional and/or scientific conferences, lectures at symposiums, etc.) [I currently produce these or have produced them]

Q19 Which types of **presentations or lectures** do you *currently produce or have produced* as a part of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply.

Formal conference presentations (1)
Poster presentations (2)
Presentations at professional meetings (3)
Seminar presentations (4)
Panel presentations at events and/or conferences (5)
Other - please specify (6)

Display This Question:

If What types of research outputs do you produce as a result of your research, scholarly and/or crea... = Presentations or lectures (e.g., presentations at professional and/or scientific conferences, lectures at symposiums, etc.) [I plan to produce these in the future]

Carry Forward All Choices - Displayed & Hidden from "Which types of presentations or lectures do you currently produce or have produced as a part of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply."



Q20 Which types of presentation research, scholarly and/or creative	• 1	•		
Formal conference presen	ntations (1)			
Poster presentations (2)				
Presentations at profession	Presentations at professional meetings (3)			
Seminar presentations (4	4)			
Panel presentations at eve	ents and/or conferences (5)			
Other - please specify (6)			
Display This Question: If What types of research outputs do you produce as a result of your research, scholarly and/or crea = Grants submitted/awarded [I currently produce these or have produced them] Q21 Please indicate whether you have submitted and/or been awarded internal and external grants by checking all boxes that apply.				
	Submitted (1)	Awarded (2)		
Internal grant(s) (1)				
External grant(s) (2)				
Display This Question: If What types of research outputs do you produce as a result of your research, scholarly and/or crea = Creative, fine or performing arts (e.g., fiction, poetry, compositions, performances, visual arts, etc.) [I currently produce these or have produced them]				

Q83 Which types of creative , fine or performing arts do you <i>currently produce or have produced</i> as a part of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply.
Books of fiction (e.g., novels, collections of essays, poems, stories, etc.) (1)
Poems, plays, short stories, and creative essays (2)
Musical scores (3)
Scripts or screenwriting (4)
Performances or other live productions or readings (5)
Films or videos (6)
Exhibitions (7)
Competitions and commissions, including juried shows (8)
Catalogues, programs, or catalogue and program entries for performances, exhibitions or competitions (10)
Other - please specify (9)
Display This Question:
If What types of research outputs do you produce as a result of your research, scholarly and/or crea = Creative, fine or performing arts (e.g., fiction, poetry, compositions, performances, visual arts, etc.) [I plan to produce these in the future]
Carry Forward All Choices - Displayed & Hidden from "Which types of creative, fine or performing arts do you currently produce or have produced as a part of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply."

Q84 Which types of creative , fine or performing arts do you <i>plan to produce</i> as a part of your research, scholarly and/or creative activities at Virginia Tech? Select all that apply.
O Books of fiction (e.g., novels, collections of essays, poems, stories, etc.) (1)
O Poems, plays, short stories, and creative essays (2)
O Musical scores (3)
O Scripts or screenwriting (4)
O Performances or other live productions or readings (5)
O Films or videos (6)
O Exhibitions (7)
O Competitions and commissions, including juried shows (8)
O Catalogues, programs, or catalogue and program entries for performances, exhibitions or competitions (9)
Other - please specify (10)
Page Break —

Q23 Please indicate which research profile systems and/or platforms you currently use for professional networking, tracking research impact metrics, etc.
Elements/EFARs System (1)
ORCID iD (2)
Google Scholar Profile (3)
ResearcherID (via Web of Science) (4)
Scopus Author Profile (5)
ImpactStory Profile (6)
ResearchGate (7)
Academia.edu (8)
Mendeley (9)
LinkedIn (10)
Twitter (11)
Google+ (12)
Facebook (13)
Profiles on professional association websites (14)
Self-published professional websites (on Wix, Wordpress, etc. or independently) (15)
Kudos (16)
Other - please specify (17)

If If Please indicate which research profile systems and/or platforms you currently use for professiona... q://QID23/SelectedChoicesCount Is Not Equal to $\,0$

Carry Forward Selected Choices from "Please indicate which research profile systems and/or platforms you currently use for professional networking, tracking research impact metrics, etc."



Q68 How do you use each of the profiling systems you previously selected? *Check one or more box for each.*

	To network and connect with colleagues in my field (1)	To track research impact metrics (e.g., citations, usage, altmetrics) (2)	To showcase my work and increase my visibility as a scholar (3)	Other (4)
Elements/EFARs System (x1)				
ORCID iD (x2)				
Google Scholar Profile (x3)				
ResearcherID (via Web of Science) (x4)				
Scopus Author Profile (x5)				
ImpactStory Profile (x6)				
ResearchGate (x7)				
Academia.edu (x8)				
Mendeley (x9)				
LinkedIn (x10)				
Twitter (x11)				
Google+ (x12)				
Facebook (x13)				

Profiles on professional association websites (x14)				
Self-published professional websites (on Wix, Wordpress, etc. or independently) (x15)				
Kudos (x16)				
Other - please specify (x17)				
Other] (Count) > 0 Q69 Please describe as the previous question.		use any profiling sy		
q://QID23/SelectedChoice	esCount Is Not Equal to			
	Carry Forward All Choices - Displayed & Hidden from "How do you use each of the profiling systems you previously selected? Check one or more box for each."			

X→

Q70 Why do you use the profiling system(s) you previously selected? *Check one or both boxes for each.*

	I am expected to use this by my promotion and tenure committee, supervisor, and/or unit (1)	I find this personally or professionally valuable (2)
Elements/EFARs System (xx1)		
ORCID iD (xx2)		
Google Scholar Profile (xx3)		
ResearcherID (via Web of Science) (xx4)		
Scopus Author Profile (xx5)		
ImpactStory Profile (xx6)		
ResearchGate (xx7)		
Academia.edu (xx8)		
Mendeley (xx9)		
LinkedIn (xx10)		
Twitter (xx11)		
Google+ (xx12)		
Facebook (xx13)		
Profiles on professional association websites (xx14)		

Self-published professional websites (on Wix, Wordpress, etc. or independently) (xx15)	
Kudos (xx16)	
Other - please specify (xx17)	

Q60 What types of research impact metrics do you use or rely on? Check all that apply.
Citation counts to individual works (1)
Journal acceptance rate (2)
Journal metrics (e.g., Journal Impact Factor, etc.) (3)
Journal reputation (18)
Number of publications (4)
Grant proposal(s) submitted (20)
Grant acceptance rate (funded grants only) (5)
Grant/Award Sponsor or funding organization (funded grants only) (6)
Grant award amount (funded grants only) (7)
Author h-index (8)
Location and geographic scope of conference, event, symposium, etc. (9)
Association, society, or organization sponsoring conference where you presented (10)
Usage statistics (page views, downloads) (11)
Altmetrics (i.e., online attention to research) (12)
Expert peer reviews of individual works (13)
Book reviews (14)
Attendance / audience numbers at presentations or performances (15)
Awards / Recognitions / Honors (16)
Qualitative or narrative assessment (19)

Other (17)	

If If What types of research impact metrics do you use or rely on? Check all that apply. q://QID60/SelectedChoicesCount Is Not Equal to 0

Carry Forward Selected Choices from "What types of research impact metrics do you use or rely on? Check all that apply."



Q71 Why do you use or rely on each of the following research impact metrics?

	I am expected to use this by my promotion and tenure committee, supervisor, and/or unit (1)	I find this personally or professionally valuable (2)
Citation counts to individual works (x1)		
Journal acceptance rate (x2)		
Journal metrics (e.g., Journal Impact Factor, etc.) (x3)		
Journal reputation (x18)		
Number of publications (x4)		
Grant proposal(s) submitted (x20)		
Grant acceptance rate (funded grants only) (x5)		
Grant/Award Sponsor or funding organization (funded grants only) (x6)		
Grant award amount (funded grants only) (x7)		
Author h-index (x8)		
Location and geographic scope of conference, event, symposium, etc. (x9)		
Association, society, or organization sponsoring conference where you presented (x10)		
Usage statistics (page views, downloads) (x11)		

Altmetrics (i.e., online attention to research) (x12)		
Expert peer reviews of individual works (x13)		
Book reviews (x14)		
Attendance / audience numbers at presentations or performances (x15)		
Awards / Recognitions / Honors (x16)		
Qualitative or narrative assessment (x19)		
Other (x17)		
Q61 Please describe any other wascholarship, or creative activities	rays you or your department assess s. (optional)	the impact of your research,
	D. J	
Start of Block: Incentive Based	виageting	
Q63 How familiar are you with '(PIBB)?	Virginia Tech's Partnership for an I	ncentive Based Budget Expert on the matter

0		
Q64 To what extent has the PIBB affected or do your opening to pursue?	ou anticipate it affection	ng the <i>types of research</i> A great deal
0		—
Q66 To what extent has the PIBB affected or do yellownstrate impact of your research outputs?	ou anticipate it affection	ng <i>how you assess and</i> A great deal
Q86 How, if at all, do you feel the PIBB should be productivity? Please explain why you feel it should	•	

Start of Block: Assessment of Research

	For each of the following statements, please or disagree with the statement.	e move the slider to refle	ect to what extent you
Q67	My department fairly assesses my research	output. Strongly Disagree	Strongly Agree
	0		
Q68	My college or administrative unit fairly ass	esses my research output Strongly Disagree	t. Strongly Agree
	0		
Q69	The university fairly assesses my research of	output. Strongly Disagree	Strongly Agree
Q87 fair?	What problems, if any, do you see with rese	earch assessment and ho	w could it be made more
-			

Page Break ——

Q70 Consider faculty salaries among Virginia Tech peer institutions, assess the following statement. I feel I am fairly compensated for my research responsibilities in comparison to my colleagues at Virginia Tech SCHEV designated peer institutions.

Strongly Disagree Strongly Agree

	Strongly Disagree	Strongly Agree
Please indicate your level of agreement ()		
Q89 Please provide any comments you would like compensation. <i>(optional)</i>	te to share on the fairnes	ss of your
Page Break		

Q71 I am aware the faculty salaries at Virginia Tech's SCHEV designated				35th per	rcentile i	n
Yes (1)						
No (2)						
Provide additional comments if desired.	(3)					
Q72 I am aware <i>the target</i> for each Virginia inst 60th percentile of the average salaries of its SCF				salary av	erage is	the
Yes (1)						
No (2)						
Provide additional comments if desired.	(3)					
End of Block: Assessment of Research						
Start of Block: Time Use						
Q72 In terms of your official job description, wh category below?	at perc	entages o	of your t	ime are a	assigned	to each
	0	20	40	60	80	100
Research ()						
Teaching ()						
Service ()						
Other - please specify ()						
				•		

low?	0	20	40	60	80	100
Research ()						
Teaching ()						
Service ()			_i			
Other - please specify ()						
88 Please provide any feedback on time allocation with they affect your research outputs or their important their important provides any feedback on time allocation.				our facu	ılty role	and
		- - -				
d of Block: Time Use		- - -				
		- - -				
art of Block: Demographics		- - -				
art of Block: Demographics		- - -				
art of Block: Demographics 6 What is your gender identity?		_				

Q8	What is your age?
	O 18-24 (1)
	O 25-34 (2)
	O 35-44 (3)
	O 45-54 (4)
	O 55-64 (5)
	O 65-74 (6)
	O Above 75 (7)
	O Prefer not to answer (8)

Q10 Which of the following race or ethnic categories do you identify with? (check all that apply)
African American or Black (1)
Asian or Asian-American (2)
White or Caucasian (3)
Hispanic or Latino/a/x (4)
American Indian or Alaskan Native (5)
Native Hawaiian or other Pacific Islander (6)
Middle Eastern or North African (MENA) (7)
Multiple races (8)
Other - please specify (9)
Prefer not to answer (10)
Q11 How many years have you held professional faculty appointment(s) at Virginia Tech?
C Less than 1 year (1)
1 to 5 years (2)
○ 6 to 10 years (3)
11 to 20 years (4)
O 21 to 30 years (5)
O More than 30 years (6)
O Prefer not to answer (7)

Q12 How many total years have you held professional faculty appointment(s) (including appointments outside of Virginia Tech)?
O Less than 1 year (1)
O 1 to 5 years (2)
O 6 to 10 years (3)
O 11 to 20 years (4)
O 21 to 30 years (5)
O More than 30 years (6)
O Prefer not to answer (7)

Q13 What top-level unit are you primarily affiliated with? If equally affiliated with more than one, please check all that apply.
College of Agriculture and Life Sciences (1)
College of Architecture and Urban Studies (2)
Pamplin College of Business (3)
College of Engineering (4)
College of Liberal Arts and Human Sciences (5)
College of Natural Resources and Environment (6)
College of Science (7)
Corps of Cadets (8)
Honors College (9)
Virginia-Maryland College of Veterinary Medicine (10)
Virginia Tech Carilion School of Medicine and Fralin Biomedical Research Institute (11)
University Libraries (12)
Student Affairs (13)
Other (14)
Prefer not to answer (15)

Q14 What department are you primarily affiliated with? If affiliated equally with morplease fill in two or more options as appropriate.	re than one,
OAffiliation 1 (1)	
Affiliation 2 (2)	
Affiliation 3 (3)	
Prefer not to answer (4)	
End of Block: Demographics	
Start of Block: Follow-up needs	
Q92 Which of the following (if any) have you ever used in your role as Virginia Techlicense or share your research outputs?	n faculty to
Open Licensing (Creative Commons, Public Domain, other) (1)	
Open Source Licensing (Apache, BSD, GNU, MIT, Mozilla, Comment Devel Distribution License, Eclipse Public License, other) (2)	opment and
Open Data (sharing of some form of your research data in a way that makes it available) (3)	publicly
Open Access (either by publishing in an open access journal, by posting work VTechWorks institutional repository, or through another method) (4)	s to the
Other - please specify (5)	

offered on any of the following?	
Scholarly publishing (1)	
Different types of research impact metrics, such as a in terms of research impact (2)	altmetrics, and what they demonstrate
Tracking accurate metrics of my research outputs (3)
Maintaining and establishing researcher profiles (4))
Promoting my research and/or improving my schola	arly online presence and visibility (5)
Researcher visibility (6)	
Open Access and author rights (9)	
Qualitative research assessment (7)	
Other - please specify (8)	
Q91 Additional comments: if there is anything else you'd li this survey, please add your comments here. (optional)	ke to share about topics covered in

Q66 Are you interested in services, workshops, instruction, and educational materials being

Q67 If you are interested in participating in a confidential interview (approx. 15-20 min) to discuss faculty research assessment further or would like to be contacted by University Libraries regarding the services above, please follow this link to provide us with your name and email address. The form at the link cannot be tied to your survey responses, which will remain anonymous.

The link will open in a new window. Please make sure to click the next arrow in this window to submit the survey.

End of Block: Follow-up needs

5.3 Appendix C

Employee Benefits Committee's June 2017 Report to President Sands

Timothy D. Sands, President Office of the President (0131) Burruss Hall, RM210, Virginia Tech 800 Drillfield Drive Blacksburg, VA 24061 June 20, 2017

Dwight D. Viehland, Professor Dept. Materials Sci. and Eng. 201 Holden Hall, Virginia Tech Blacksburg, VA 24061 dviehlan@vt.edu

Dear Tim

I am writing to you on behalf of the Employee Benefits Committee, to which you appointed me Chair for the 2016-2017 Academic Year.

At this time, we provide to you a brief summary of our work during this year. In Appendix A, we attach brief one page summaries of the four important topics that were discussed this year. In addition, the Minutes for all of our meetings are posted at http://www.governance.vt.edu/employee-benefits-committee.html.

The important issues brought before the Committee for discussion this year were:

- Need for improved benefits. The benefits package offered by the State of Virginia is noncompetitive with our Peer Institutes. Of particular concern to the Committee was the lack of provided healthcare in retirement for employees.
- The need to increase the number of available accredited childcare facilities for faculty, staff, and students.
- Need for innovative flexible employment options in response to changing workplace demographics and an aging society.
- Need for reconsideration of staff holiday leave requirements.

On behalf of all employees of the Virginia Tech Community, the Committee hopes that the Administration can offer improved benefits. Frankly, the State of Virginia ranks very low amongst all 50 states with regards to benefits. Virginia Tech must figure out a way to do better if we are to retain talent, improve the quality of the VT educational experience, and become a nationally recognized place of Destination Areas.

Sincerely,

Dwight D. Viehland, on behalf of the Employee's Benefits committee

Cc: Hans Robinson (President Faculty Senate), John Ferris (vice President Faculty Senate), Bob Hicok (Secretary Faculty Senate), Monte Abbas (past President Faculty Senate), Alex Parrish (President of Staff Senate), Members Employee Benefits Committee, April Myers (President's Office).

Appendix A. Topics of Importance to Committee

Topic 1. Employee Benefits Committee Jan 2017 Need for Improved Benefits

The Employee Benefits Committee had discussions concerning the benefits offered by Virginia Tech, in comparisons to some of our peer institutions. These discussions are summarized as follows.

Retiree Pension:

Both defined benefits and defined contribution plans offered by Virginia Tech severely lack in comparison to peers. In addition, there was a significant decline in the size of overall compensation packages for employees hired 2010 and later.

- (a) VRS. VT employees hired before 1 July 2010 receive 1.7% of their salary per year worked, and those hired after that date are in a hybrid (defined benefits and defined contribution) system. A number of our peers (including Penn State, University of Illinois, Ohio State, and North Carolina State University) offer defined benefits plans of 2% per year worked. It is also noted for VT employees hired in the new hybrid plan that VT pays 8.5% into VRS, and that the employee has to pay 5%; however, our peer institutions have no such required contribution from the employee.
- (b) ORP: VT faculty can opt out of the VRS system, and select ORP. VT faculty hired before 1 July 2010 receive 10.4% of salary into their 401a. Employees hired after 7/1/2010 receive 8.5% from VT and are required to pay 5% themselves. A number of our peers (including Penn State, UIUC, OSU, and NCSU) also offer ORP options for faculty, but each contribute 15% of salary which is the amount considered reasonable to maintain an acceptable standard of living in retirement.

<u>Retiree Healthcare</u>: VT employees receive only 4\$/month for each year of service. Even after 30years of service, this is not even sufficient to make the lowest level payment for Medicare Part B. A number of our peers (including Ohio State, Penn State, Texas A&M, University of Illinois, North Carolina State University) provide continuation of healthcare insurance to retired employees, as a rule of thumb 5% per year served, with full healthcare provided after 20years of service.

<u>Tuition Reimbursement for Family Members</u>: VT employees receive remuneration for taking classes themselves, but this does not extend to other family members. A number of our peers (including Penn State, UIUC, University of Maryland, Rutgers, and NCSU) provide as a rule of thumb a 75% tuition reduction for spouses and children of employees, provided after only a modest time of service.

The committee realizes many, if not all, of these differences with our peers are limited by Virginia State laws and requirements. It is recognized that the shortcomings in benefits are not the fault of VT.

However, we *recommend* by vote of the committee that the VT Administration try to do significantly more to advance the benefits needs of the employees with the State Government. These issues, along with the fact that VT faculty are in the bottom quartile in salary with respect to peer institutions, presents a serious problem going forward with maintaining a high quality faculty that enables Virginia Tech to be a national destination area of higher education and research.

Topic 2.

Employee Benefits Committee March 2017

Childcare Issues for Faculty, Staff, and Students

<u>Need for Growth and Investment</u>: Virginia Tech faculty and staff do not have adequate maternity or paternity leave benefits. Consequently, there is an immense need for child care facilities for newborns and infants. The issues, in particular, which need to be addressed are availability, affordability, and quality.

However, childcare facilities in the area vary in availability, quality, and costs: the specific situation varies with the age of the child. There is a shortage of *any* kind of childcare facilities for newborns and infants, with demand far outstripping supply. For children 2 years or older, there is only a shortage of accredited high quality child care. Accredited facilities subscribe to standards that are significantly higher than the minimum standards required for licensing by state regulatory agencies. There are only 2 accredited child care facilities in the area: Rainbow Riders and the Virginia Tech Child Development Lab, which is run by Virginia Tech.

<u>Need for Administration Assistance</u>: We met with several informed individuals about this issue. They were seeking to raise awareness and to build support for ways that the Campus could begin to improve the situation. Improvement of the situation would require significant capital investment. The committee was informed that President Sands and others in the Administration have the vision and care to help. They have concept proposals before them. Rachel Gabriele, Assistant Provost for Faculty Initiatives & Policies, attended the February Committee on behalf of Jack Finney, to provide an update on current measures being considered.

The committee recognizes the significance of this problem. It impacts the Campus' ability to recruit and retain talent, and also impinges upon Diversity. *The committee recommends, by vote, an encouragement to the Campus Administration to take action to help increase the number of childcare slots for employees*.

We also make the following suggestions for consideration of policy and/or operational/procedural changes:

- The university should provide more financial support to the child care facilities with which it establishes relationships. These funds would not be used to subsidize child care costs for employees, but instead used to improve the facilities and ensure that the facilities can attract/retain the quality of teachers needed to stay accredited.
- Encourage flexible and affordable child care for infants, where the time (within normal working hours) could be less than 40 hours a week. This could be important, in particular, to graduate students.
- Establish a transparent process that ensures that faculty and staff have equitable access to the childcare the university controls.
- Assist in developing a pipeline of providers. For example, New River Community College is creating a career path in Childcare.
- Develop relationships with more providers in addition to Rainbow Riders.
- Provide more adequate maternity or paternity benefits to employees, such as paid leave.

Topic 3. Employee Benefits Committee

March 2017 Longevity, Retirement, and Job Satisfaction at Virginia Tech

<u>Opportunity comes with a Challenge</u>: The workforce of our Nation is aging and significantly altering the demographics of the workplace. Universities are at the forefront of these changes. Across academia a disproportional number of faculty and staff are close to the standard retirement age of 65. Many employees are approaching retirement reluctantly. This will transform the dynamics of academia. A wide range of reasons for reluctance have been cited, including: economic, healthcare, and continued interest in teaching/research.

Of particular concern should be that Virginia Tech employees receive lower retirement contributions than our peers, and do not receive retiree healthcare benefits. This will present a challenge to our campus by having to balance renewing itself by hiring young faculty/staff while retaining a legacy workforce. This legacy workforce has valuable experience, but may not necessarily want to continue working full time hours.

<u>Need for Administration Assistance</u>: Rachel Gabriele, Assistant Provost for Faculty Initiatives & Policies, attended the February Committee on behalf of Jack Finney, to provide an update on current measures being considered. We learned that President Sands has had the vision to develop enhancements in the voluntary transition retirement plan (VTRP) which is awaiting approval at the Board level with a planned implementation this next academic year (Fall 2017). The plan offers employees with at least twenty (20) years of service the opportunity to receive healthcare benefits for up to five years (or until age 65), if they announce their retirement and work 50% time for 2 years. Once submitted, the retirement decision is irrevocable.

The committee recognizes the significance of the structural employment issues presented to VT by demographic changes. *The committee recommends, by vote, an encouragement to the Campus Administration to be further innovative in <u>flexible employment</u> options.* We make the following suggestions:

- Offer additional types of flexible retirement options.
- Improve workplace and scheduling accommodations.
- Presently, employees working 75% of full-time receive full healthcare benefits. Reduce this threshold to 50%.
- Encourage the State of Virginia to change its policy on not providing retiree healthcare benefits, and to increase the State's retirement contribution for both VRS and ORP members.
- Establish a task force to deal with this challenge of longevity, retirement and job satisfaction at Virginia Tech.

Topic 4.

Employee Benefits Committee May 2017

Regarding mandatory leave policy during holiday closing

Presently, all calendar year employees (including staff, AP faculty, and Teaching and Research faculty) are required to use leave time when the Campus closes between Christmas and New Year. This policy was enacted about 8 years ago. At that time, the purported-reason was twofold: the vast majority of the workforce generally chooses to take leave during this time and, secondly, if all non-essential facilities were closed, then the university would be able to realize a reduction in energy consumption. However, to the best of our knowledge there exists no data about whether the projected energy savings are being realized.

: Annual leave has been earned by the employee. It is unfair that it be mandatorily used at particular dates in order to achieve an administrative cost reduction. Furthermore, the requirement is imposed independent of religious beliefs, or personal values and family needs. The right to take leave during this time, if the employee chooses, is important, but an obligation to do so is not fair.

We note that the University is offering an increasing number of classes during the Winter Break Session (i.e., 26 December 2017 to 11 January 2018). Students and faculty participating in these sessions need some staff support. Given that the facilities relied upon by students, faculty and related support staff during this Winter Break session now remain open, this would reduce energy savings and further call into question the projections that had been assumed when justifying the initial policy change. In addition, since maintenance activities (IT, Facilities, other) need to be performed during this period, some employees are required to work.

The committee recognizes the significance of this problem. It impacts fundamental fairness in the work environment for our campus calendar year employees. The issues impinge upon personal values, family life, and religious beliefs.

We make the following suggestions for consideration of policy changes:

• If the campus continues to close between Christmas and New Year, then the university should provide paid holiday leave to all calendar year employees. This should be in addition to earned leave

- If additional paid leave cannot be granted for the entire duration of the holiday closing, then all calendar year employees should have the right, not the obligation, to take leave during the holiday season.
- If individual employees do not share the same religious beliefs as the vast majority, then alternate holiday leave schedules should be allowed for these individuals. This is in line with the Commission on Equal Opportunity and Diversity's recently issued recommendations (https://vtnews.vt.edu/notices/adm-evergreens/adm-holidaysforplanning.html).