FEC Reflections by Dr Gregory Taylor

Let me begin with an apology. It has been our custom to publish an annual reflection on the FEC process in the Faculty of Science. Unfortunately, we missed a cycle last year in what could only be described as an unusual year as we worked to deal with budget pressures. This year has left me with more time to reflect than last year, and so we are back on track again. While I might have been delinquent last year, this was not the case for our elected reps. So this year we provide reflections from two cohorts of new FEC members. David Coltman and Mark Lewis reflect on their experiences as new FEC members in December 2009. Michael Bowling, Alex Brown, and Vladimir Troitsky reflect on their experiences as new FEC members in December 2010.

The FEC experience has some elements that remain relatively constant from year to year, while other elements show significant change. Let me start with the latter. Certainly one of the more significant changes in the past several years has been the effect of recent changes to the Faculty Agreement that added several steps to the salary scale at the level of Associate Professor. The biggest impact of these changes has been felt by people who were at the maximum salary for rank. The addition of two steps provided these people with an opportunity to see their salary increase as a result of merit. For many this has been the case. The impact, however, was not limited to these people, since in effect, there were more people competing for a limited number of merit increments. A reasonable approximation for the magnitude of this effect is something in the range of 20 fewer half increments to disburse to staff who were not limited by a cap. On one hand this is a small number relative to the total number of increments we have to disburse. On the other hand it is a very large number when it boils down to the final day when the books have to be balanced. This year was the third year that we had to grapple with this issue. We can anticipate the magnitude of the issue to decline in the years to come as a portion of our staff once again come up against a salary cap.
Another recent change that has had repercussions has been a change in the ordering of cases to be heard at FEC. Some time ago, cases were considered on the basis of total salary. This gave way to a system that ordered cases on the basis of base salary (a subtle, but real change). More recently we have been asked to abandon the use of salary as a basis for ordering, since it essentially provided confidential information. Our solution to this challenge was to order cases by time since Ph.D. This has been a less subtle change. In the past, people who consistently garnered multiple increments would find their cases being considered later and later in the FEC process. Since expectations rise for our more senior faculty, these rapid risers would quickly find themselves being compared with very senior and more experienced staff. With the new system, a given Ph.D. cohort rises together and will always be compared more closely to their own cohort, than they will to other Ph.D. cohorts. My sense is that these new comparisons did result in change. I would think this change benefits those who consistently show high merit. Note that we are looking at the possibility of making some adjustments in future years. As an example, FEC felt it might be wise to order Assistant Professors by years remaining on probation (beginning with the junior staff). This would allow a more clear view of the tenure track process than year of Ph.D.

A third change took effect this year. I do not believe that it is one that affects the decisions we make, but it surely makes the process proceed more smoothly and also means that fewer of you receive that dreaded letter; “regretfully FEC did not agree with the recommendation of your chair...” We have always worked with the reality that there are a fixed number of increments to award. Clearly this implies that there will be a limit on the number of increments that might flow to any one department. Needless to say, Chairs will always want to see increments go to people in their departments. In their zeal, they make recommendations in good faith that often have us having to claw back a large number of increments. The task is often a grueling one that makes for long meetings and disappointing outcomes when those letters from the Dean arrive. This year we implemented a new process. Chairs were provided increment targets based upon the historical success of their departments, and asked to come in at or below these targets. The net result is that fewer recommendations had to be overturned, and a greater proportion of overturned recommendations resulted in more merit increments flowing to the staff member. This year 8 of the 29 letters that people received when FEC disagreed with their chair, were good news letters, not bad news letters.

Another change I would like to describe is one that has occurred over a period of years. Increasingly we are seeing people make more use of the “additional data” section to describe the impact of their contributions. This has been a positive change. FEC can only make decisions on the basis of information that is provided to them. In many cases these read like true introspections, and can be very valuable indeed. I believe this has improved our decision making. Most people now make use of this opportunity, but there are some who elect not to do so. If you are one of these, you may want to reconsider. FEC cannot make a positive decision about
merit that it is unaware of, and ultimately it is the staff member’s responsibility to provide relevant information. Having said that, there can be danger here as well. To begin with, mixing fluff with substance is certainly counter-productive. Also, if the additional data comes in the form of a long monograph, there is a risk that FEC will not be able to discern the important trees within the forest, in effect making it hard to see the forest through the trees. My advice is to use this section, but stick to the important information and be concise. If your additional data begins to occupy more than a page, you are running the risk of losing your audience. Your chair will understand this. They can provide more concrete advice that is relevant to your style of presentation. Oh, and while I am thinking about how you communicate, be sure to follow convention when you are filling in the boxes. As an example, FEC cares about things like how your students are involved in publication. If this is true, why would you choose to neglect convention (and instructions) and not boldface the names of your students that appear as authors on your publications? Why would you want to risk the possibility that FEC might not see that the first two authors on that publication are your students?

I mentioned that some things do not seem to change much over time. One thing that certainly rings true year after year is the excitement that is generated by a faculty member who shows outstanding merit in teaching, research, and service. These are still the people that are most likely to collect multiple merit increments. I know there are those among us who still believe that all that really matters is the numbers of papers published. There is probably not much I can say to change this perspective. For those who still believe this to be true, perhaps it has been because you have yet to experience a decision that so clearly reflects the importance of quality (as opposed to quantity) of research outcomes, quality of teaching, or quality of service, that there can be no ambiguity remaining. If you are in such a position and are open to have your perspectives change, you should consider letting your name stand for service on FEC.

So what about the numbers? This year, 35 professors in the Faculty of Science were eligible to be considered for tenure, either through an early tenure consideration or at the end of first or second probation. Of these, 5 cases (14%) were brought forward for consideration. With deliberations complete, all were granted. A total of 67 Associate Professors were eligible to apply for promotion to full Professor. Six applications for promotion were submitted (9% of eligible candidates) and all were granted promotion. At the time of our deliberations, 3 of the 67 Associate Professors who were eligible to apply for promotion were at the salary maximum for that rank. Given the decisions we made this year, a total of 4 Associate Professors will be at the maximum salary for that rank in the year to come. Applications for promotions within the ranks of our FSO were also considered. Of the 17 FSOs eligible for promotion, one submitted an application and that promotion was granted.

In considering allocation of increments, FEC clearly sees its role as one of rewarding merit arising from effort and not simply effort itself. This is true even for an award of 0.5 increments since a “OB” is awarded for
satisfactory performance. This year, Chairs came in closer to the 1.2 target than they have in the past. In several recent years we were faced with the daunting task of clawing back close to 50 half increments. This year, the target was only 13. While at times this seemed to keep the process moving faster, the tough cases at the margins still required a great deal of discussion and debate. How were the merit increments distributed among the 319 academic staff within our FEC mandate? The answer is that decisions were made on 17 increments at the 0.0 level, 34 at the 0.5 level, 118 at 1.0, 103 at 1.5, 41 at 2.0 and 4 at 2.5. Another staff member received a partial increment that brought them to the maximum salary at rank.

“As a final thought let me say a few words about the quality of the science that we do. This became obvious to me in many ways, but let me cite five. “

The first would be the incredible engagement and productivity of our young staff. The speed at which our new staff develops high profiles in teaching and research after their arrival on campus is often breathtaking.

The second is the profound leadership and impact of our more senior staff. This leadership is expressed in diverse and dramatic ways at the local, regional, national, and international levels. The third would be the incredible service that many of us provide in our scientific, university, and broader communities.

We invest our time generously on behalf of a larger whole. The fourth would be our collective commitment to excellence in teaching. This year almost a third of our staff taught a course in which students ranked their instructor above the 75th percentile in 8 of 10 questions on the IDQ questionnaire. The fifth would be our growing profile in terms of publication in top tier journals in science. In this reporting year, more than a quarter of the journals publications in our Faculty appears in journals ranked within the top 10% of their discipline, and nearly 2/3rds were published in journals ranked in the top 30% of their discipline. In the years prior to 2002, less than 5 of our published works would typically have appeared in Science, Nature or Proceedings of the National Academy of Science. By 2009, that number has increased steadily to more than 25.

Thanks to everyone who invested their time and effort into this annual process. Special thanks go out to our elected staff that serves on FEC, and in particular David Coltman and Mark Lewis who have completed their tenure on FEC. Special thanks also go out to our Chairs who invest the most time and effort of anyone in this process. Two of our Chairs we know will not be back next year. The Acting Chair of Earth and Atmospheric Sciences, Rob Creaser, completes his term at the end of December. Also the Chair of Psychology, Doug Grant, completed his 20th FEC this year (10 in Arts, 10 in Science) and will be completing his term as Chair this June. To all those named or not, the FEC process is a major commitment of time and energy, but it is also one that helps define our success as a Faculty and a University. Gregory Taylor, Dean of Science
The Process

As newly elected members of the committee, we had two preliminary meetings to prepare us for the reading of the FEC files and for the weeklong meeting to make the decisions. The first was with the Vice Dean to help acquaint ourselves with the rules and regulations of FEC. The second involved both the Vice Dean and the Chairs of the seven departments in the Faculty of Science (Biological Sciences, Chemistry, Computing Science, Earth and Atmospheric Science, Mathematical and Statistical Sciences, Physics, and Psychology). At this meeting, we provided advice to the Dean regarding applications for sabbatical (applications we had read prior to the meeting). Also, at this meeting, the chairs tried to inform us about the idiosyncrasies of evaluating performance in each department, e.g., the importance and value of conference proceedings in computer science, the interpretation of 300+ author papers in particle physics, the difficulty and value of a mathematical proof... The diversity within departments was as amazing as that across the seven departments! Finally we were ready to embark on the FEC process itself – two weeks before the start of the FEC meeting the binders arrived! It was then that the thought crossed our minds “What have we gotten ourselves into?”

In addition to reading recommendations for merit increments, we also review the applications for tenure and promotion, including the recommendation letter from the Chair, the external letters, and the CV of the candidate. All of these materials comprise “the binders” – two 3” binders of approximately 1200-1400 total pages of information! (Please, please keep this quantity of information in mind, when you think about the clarity and succinctness of your annual report.)

The process has not changed from recent years with 14 sets of eyes reading, probing, examining evaluating and dissecting the ~320 annual reports of and Chairs recommendations for Assistant Professors, Associate Professors, Full Professors, and Faculty Service Officers.

FEC 2010 Reflections by Drs Alex Brown, Michael Bowling and Vladimir Troitsky

In keeping with the annual tradition, we (the Associate Professors newly appointed to FEC) have been asked to reflect on the work done this year by the Committee. In writing our reflections, we have considered the excellent recent commentaries by Associate Professors Sarah Gleeson (Earth & Atmospheric Sciences), Roger Moore (Physics) and Joerg Sander (Computing Science) on the 2008 FEC process and by Professors Mazi Shirvani (Mathematical & Statistical Sciences) and Fred West (Chemistry) in 2007.

So, what’s left to be said that hasn’t been said already? Well, we’ll try to shed more light on the process.
This year FEC was tasked with finding “only” 12 half increments to come in at the allotted number of 1.2 increments per faculty member. While this sounds “easier” than in previous years, the task was still difficult given the extremely high quality of the work done in all categories of research, service, and teaching by faculty members in Science.

As done in the past, each case is discussed individually starting from the most junior Assistant Professor to the most senior Full Professor. Thus, performance comparisons are done as apples-to-apples and the expectations for performance rise as one’s career progresses. The notable exceptions to the seniority ordering are the tenure and promotion cases which are scheduled such that the candidate’s departmental representative can attend. Remember that promotion and/or tenure decisions are made separately from decisions on merit increments. If the committee is happy with the Chair’s recommendation we move on quickly. However, if questions arise, short (or sometimes long) discussions can ensue about the merits or demerits of a particular case. We were impressed with the work that the Chairs do to prepare for the questions and comments from the committee. Their careful preparation, based on the information you provide them, usually clarified any questions regarding significance of research, teaching performance, and service loads.

We think it important to point out that all cases for merit begin at 0.0b which is defined as “that performance requirements for an increment have not been met but performance is acceptable notwithstanding” under the Faculty Agreement. Any recommendation above this must have merit in one or more of the categories of research, teaching, or service.

**Research** - determination of merit increments.

What we found most impressive was the careful evaluation of the quality of the research rather than simply its quantity. Discussion regarding significance of publications (or conference proceedings for those in Computer Science) and the research they presented often occurred. These discussions involved the balance between impact factors, nature of impact factors for particular disciplines, the difference between impact for basic science versus applied research (where we learned impact often occurs in an industry context rather than in further peer-reviewed research), time scales for impact in various fields (which are not always compatible with current impact factor reporting practices), specialized versus more general venues for publication, and roles of various authors in a research project. The input from Chairs, based on information you provide them, was particularly valuable in these discussions. It was gratifying to see that a single piece of excellent work or a long-term project finally coming to fruition could, and often would, be rewarded. One important point to make is that the annual FEC reporting period should not be seen as encouraging only short-term research goals.

“I am far more than the numbers of papers I publish or a set of impact factors.”
If you set out on long-term projects, which may not result in tangible research publications, it is important to relay information regarding the progress of these projects in your annual report. Research progress does not always have to equal research publications in a given year.

We were also impressed with the breadth of the Faculty. We were exposed to research in other disciplines, and we realized how diverse it is. Our faculty members dig for mammoth bones, study sponges, compose programs to play chess, are involved the Large Hadron Collider, watch neutron stars... This diverse, high quality research is then published in high impact venues like Nature and Science. The exciting scientific discoveries we read about in newspapers and magazines are happening right here at U of A!

Teaching
“I am not just an IDQ score.”

Repeat after us “Teaching is important. Teaching is important. Teaching is important.” Perhaps, the role teaching plays in determining merit was one of our biggest misconceptions of the FEC process. Excellent teaching is meritorious, good teaching is valued and poor teaching can lead to diminished merit. Most importantly, the evaluation of teaching was based on more than student evaluations (the so-called IDQ scores). A variety of other information was factored into the evaluation of teaching performance: historical trends in particular courses, teaching a course for the first time, seminars and workshops taken on teaching improvement or innovation, internal and external awards for teaching, and new teaching development and innovation spelled out clearly on annual reports. All formed an impression of teaching – one that could lead to an increase (or decrease) of half an increment in merit.

Service
“What does that acronym mean?”

What was clear was that service could come in many forms: to your Department, to the Faculty, to the University, to the scientific community and to the public. Also, service was the one evaluation criterion for which expectations rose significantly with seniority. For Assistant Professors expectations were modest while for Full Professors there was an expectation of service at some level. Detailing the exact roles and responsibilities of particular service titles often fell on the Department Chairs (as well as explaining particular acronyms for various organizations and committees!). If you take on a service role that involves significant responsibilities, explain it briefly on your annual report.

Conclusions
FEC week was tiring yet truly rewarding. The people involved in the process are extremely diligent and dedicated (even if we do say so ourselves). They carefully examine, scrutinize, and question the materials provided – keep in mind that you can only be evaluated based on the information provided in your annual report. We are not mind readers and neither is your departmental chair. If you have done something meritorious, let us know in your annual report!
Is the process perfect? Probably not like many others that require processing of significant amounts of information. However, overall the process is very fair (think peer review with 14 referees’ reports – opinions and interpretation of facts may differ but the overall judgment will almost always be correct). The process also works well for one that must have constraints such as a fixed number of increments per faculty member (the merit budget is not unlimited) and the ability to only award half increments.

We come away from FEC with a great deal of respect for many of our colleagues in the Faculty and for the privilege of being part of this community of scholars and educators.

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Alex Brown (Chemistry), Michael Bowling (Computer Science), Vladimir Troitsky (Mathematical and Statistical Sciences) - December 16, 2010

FEC Reflections 2009 – David Coltman and Mark Lewis

The Process

As the newly elected members of FEC we have been asked to share our thoughts on the evaluation process. The process remains largely unchanged from previous years. The committee consists of 14 people including the Vice Dean (and FEC chair), the department chairs, a representative of the President’s Review Committee, three elected Associate Professors, and two elected Full Professors (yours truly, this year’s newbies). We spend the week before the evaluation meetings reviewing over 300 annual reports and applications for tenure, promotion and sabbatical submitted by the faculty. This year, we were informed that the number of increments recommended by the departmental chairs exceeded the available pool by 36 half increments. Therefore during our review we were tasked with identifying cases where the recommended number of increments might be reduced, in order to balance the increments to the available number. This was no easy task.

During the meeting week, each case is brought up in order of seniority, from junior to senior. The chair calls for questions on each case and, if there are no questions from the committee, the recommended merit increment is taken as passed unanimously in favour. In most cases, however, at least one committee member will ask the departmental chair to justify the recommendation or clarify some aspect of the report, and a discussion ensues. The period of discussion can be short or of considerable length, depending on the nature of the case. After discussion, a vote is held and each member can vote in favour, in opposition, or they can abstain. If the majority of the committee are in favour of the recommendation then it is passed. If not, then more discussion ensues. This may lead to another vote on a new recommendation, typically lower by one half increment but, in a few instances, a half increment higher than the chair’s recommendation.
The evaluation of merit with respect to performance in research, teaching and service is a time-consuming and challenging process. We took the approach that the merit for each case should usually be built up from a 0b (which is defined as “that performance requirements for an increment have not been met but performance is acceptable notwithstanding” under the Faculty Agreement). Performance as an academic cannot be evaluated absolutely; therefore it has to be evaluated relative to career stage, discipline and many other factors that may pertain to any specific case. Furthermore, performance in research, teaching and service is not expected to be weighed equally. Inevitably, each member of the committee likely approaches the evaluation of performance somewhat differently. The role of the departmental chairs in the discussion of each case is therefore critical because they are charged with providing a full understanding of all aspects of performance. There is clearly a lot of homework involved in each chair’s preparation for FEC.

**Merit in Research**

It is quite clear that research performance carries the most weight towards merit. We were pleased to see that the committee considers research quality first and foremost; it is clearly not a simple paper counting exercise. Furthermore, research published as a single author or with trainees was weighted highly. However, quality is not always easy to assess between disciplines. In some fields, the ranking of a journal based on impact factors might be a good yardstick for academic impact. However, this does injustice to fields where conference presentations, patents or other forms of publication are more important. Furthermore, journal impact factors might not fairly reflect the magnitude of a contribution in a field where there are relatively few publications per researcher, or in fields where the citation rate is generally low. When chairs can speak to high scientific relevance and significance of the major contributions made by a faculty member, they are very effective at making the case for merit. We also saw that external validation of research performance through awards and invitations carries significant weight towards merit. Major awards can account for up to a half increment of merit.

**Merit in Teaching**

Strong performance in teaching is regarded highly and viewed as worthy of merit. A weak teaching performance can also mean the difference in a half merit increment for a case where other aspects of performance were very strong. Evaluation of the teaching is multifaceted. The primary sources of information are the FEC report, as written by the faculty member, and statistical summaries of the student feedback (so called IDQ scores). In addition, the chair can, and when necessary does, present a wealth of additional information, ranging from student comments to input from the faculty member or their peers. We all know that IDQ scores of “customer satisfaction” are imperfect measures of teaching performance for a number of reasons. These scores may need to be put into context by the chair (e.g. historically unpopular, large enrolment, required courses; new courses; other extenuating circumstances) and weighted accordingly. However, when included as only one of several factors, a fair assessment can be made. It is also probably safe
to say that the professors who routinely score highly in most categories and in multiple courses are doing something right and are performing at a level worthy of merit.

**Merit in Service**

Service is quite a challenging category to evaluate. It was very clear that many of our faculty perform outstanding service to their department, to the university and external to the university. The level of service expected as part of acceptable performance increases with academic rank and seniority. However, because service is not weighted as heavily as teaching and research, the committee rarely supports recommendations for addition merit increments on the basis of outstanding service alone. By the same token, a strong service record can make the difference when the case for merit based on research and teaching was close to the bar for additional merit.

**Conclusions**

As scientists, we are all familiar with peer review and the process of evaluation. It is an integral part of our profession. However, we are not often put in a position where we are asked to review the professional performance of our peers, especially across a range of seniority from a variety of disciplines that have very different underlying “cultures” of practice. The departmental chairs do a tremendous job of translating these specificities and peculiarities to the committee so that we can have meaningful discussion and make informed decisions on awarding merit. Some of them even provide the committee with a briefing sheet in advance outlining the “cultural issues” specific to their discipline and departmental practices and expectations. The evaluation process feeds on information, as provided by the faculty member, and so full and accurate (yet succinct) information in an annual report really helps each case. As a committee, we do our best to ensure that fair decisions are made and meritorious performances are justly rewarded in light of all of this information, and by and large, we believe that we do a good job of this. The challenge, of course, is that there are a finite number of increments to be awarded even though performance across the faculty as a whole measured by grant income, international recognition, publication and citation rates and global university rankings continues to improve year upon year. Indeed, one of the most enjoyable aspects of serving on FEC was to discover the diversity of excellence in research, teaching and service as we worked our way through the files.

*David Coltman (Biological Sciences) and Mark Lewis (Mathematical and Statistical Sciences) December 16 2009*