Primary Factors affecting Salaries at UW:

- Scale increase: annual formulaic adjustment
- Selective increase {merit based}: annual formulaic adjustment
- Anomalies adjustment: permanent one-off salary increase
- Outstanding Performance Award: permanent one-off salary increase
- Salary floor: permanent one-off increase if salary is below the floor (rare) at promotion
- Salary Thresholds: modify the selective increase
- Starting Salary: base salary upon starting employment at UW
- Leaves: salaries are pro-rated based on duration and type of leave.
- Stipends: non-permanent additions to salary, e.g. stipend for an administrative role (chair)

Sections I to III provide mathematical expressions to show and explain *how* these factors affect salaries (with numerical examples in Section IV). The <u>acronyms and terms</u> used to simplify the expressions are:

salary $_t$ = base salary at any given time, t.

FSIP = Faculty Selective Increase Pool (the actual amount is Faculty specific)

SIU = Selective Increase Unit

FTE = Full-Time Equivalent

OPA = Outstanding Performance Award (the amount of the award is set to one SIU)

R = the average merit score you get with your annual performance feedback.

Radj = the adjustment of your R score based on which threshold(s) you may be above.

T1 = Threshold 1 (the actual amount is rank specific)

T2 = Threshold 2 (the actual amount is rank specific)

Floor – Salary floor (the actual amount is rank specific)

(Dollar amounts of Floors, Thresholds and SIUs from 2010 to present, can be found <u>HERE</u>)

I. Depiction of the Annual formulaic adjustments

While only some faculty members receive OPAs or other adjustments in any given year, all faculty members receive the scale and selective increases.

Thus, it is helpful to begin understanding the salary increase process by depicting the case for a faculty member who receives no other adjustments than the annual formulaic increases – this case depicted in (eq. 1).

salary_{t+1}=salary_t*(1+scale_{t+1}) + Radj_t *
$$\frac{FSIP}{\sum_{fac} Radj}$$
 (eq.1)

Note that Radj=
$$\begin{cases} R \text{ if salary} < T1 \\ max(0, R-0.75) \text{ if salary between } T1\&T2 \\ max(0, R-1.25) \text{ if salary} > T2 \end{cases}$$
 (eq.2)

MOA 13.4 indicates that Full scale and selective increases apply to those on parental leave, newly appointed members have full scale but a prorated selective (merit) increase.

The first term in (eq.1) -the scale increase- is intended to keep our salaries aligned with inflation and with comparator institutions, while the second term -the selective increase- is intended to reflect "career progression" with the highest progression increases at the start of career, and more moderate increases later in career (progression increases at a decreasing rate – similar to the age earnings profiles observed in raw data). Anecdotally, the aim of the selective increase was also to allocate funds more toward our early careers, when we have the greatest cash needs (e.g. mortgage down payments, etc).

II. Understanding the FSIP (Faculty Selective Increase Pool) and what it means for our selective (merit) increase

What is important to note is that the selective increase (the second term of eq.1) is just allocating shares of a pot of money (the FSIP). How large a share each member gets will simply depend on their merit score, adjusted by where their salary is in the threshold system, relative to the adjusted merit scores of the rest of the members in their Faculty.

But how large is the pot of money (the FSIP)? And what makes it larger/smaller?

Each Faculty's FSIP is calculated according to (eq.3):

$$FSIP = 0.25 * N * SIU + 0.25 * N_{(eq.3)$$

Which can be simplified:

FSIP =
$$(0.25*N+0.25*N_{ (eq.4)$$

FSIP =
$$((0.25+0.25+0.5)*N_{ (eq.5)$$

or perhaps more clearly :

FSIP =
$$(N - 0.5*N_{>T1} - 0.25*N_{>T2})*SIU$$
 (eq.6)

where $N_{>T2}$ & $N_{>T1}$ are the number fulltime equivalent number of faculty above thresholds T 2 & T 1 respectively, & N is the number of FTE faculty, within each faculty unit.

Then from (eq.1) we can elaborate that the salary increase is:

salary_{t+1} = salary_t*(1+scale_{t+1}) + Radj_t*
$$\frac{(N - 0.5*N_{>T1} - 0.25*N_{>T2})*SIU}{\sum_{fac} Radj}$$
 (eq.7)

Note that (eq.6) shows that the size of the Faculty's pot of money (their FSIP) depends on the number of faculty members they have, N, and where these faculty members are relative to the thresholds: below T1, between T1 & T2, and above T2. More people = more money in the pot. And the greater the fraction of their members below T1 &/or T2, the more money in the pot.

If we want to visualize it, we could think of the FSIP as a Faculty's pie. Each faculty member gets a slice of their Faculty's pie, and (eq.1) showed that the higher your adjusted merit score relative to others in your Faculty, the larger your slice of pie. Now (eq.6) shows that Faculties with more members get a bigger pie - which is good because they have to share the pie amongst more people. And (eq.6) also shows that the larger the fraction of a Faculty's members who are below the thresholds, the bigger the pie that Faculty gets. So for a Faculty with many lower paid members, there is a bigger pie. (Another way to look at it is that when we increase these thresholds, it means that more members will be below the thresholds, and the faculty will have a larger pie. For a member who remains above the new thresholds, their share of the pie will become slightly smaller, but the pie itself will be larger. So whether their slice of the pie – in absolute terms – is larger, smaller, or unchanged, will depend on the faculty distribution relative to the threshold changes.)

Note on increases "to base" – what this terminology means:

A salary change applied "to base," is anything that is a permanent increase.

So referring to (eq.1), anything that is on the right hand side of the equation is a permanent increase because it permanently increases Salary in the next year (salary_{t+1}). This means that both the scale and the selective (merit) are increasing our base salary. Salary_{t+1} becomes our new base for the t+1 time period.

Then for our subsequent (t+2) salary increase, scale is applied to that new base -

$$salary_{t+2} = salary_{t+1} * (1 + scale_{t+2}) + Radj_{t+1} * \frac{FSIP}{\sum_{fac} Radj}$$
(eq.8)

meaning our salary will continue to grow (even if our merit component is zero) - and this is important because if scale is at least as high as inflation, then our salaries will not "erode."

III. Depiction of salary increase in the case of additional adjustment(s)

In (eq.1), only scale and selective(merit) were included. But there are other permanent and nonpermanent components. For example, if someone gets an OPA - that is a permanent increase to base salary, and it should enter the salary increase process as depicted in (eq.9):

$$salary_{t+1} = salary_t * (1 + scale_{t+1}) + OPA_t + Radj_{t+1} * \frac{FSIP}{\sum_{fac} Radj}$$
(eq.9)

The OPA only "enters" an individual's salary process the year in which it is awarded, but because it increases our base (salary_{t+1}) it is a permanent increase - and will continue grow with future scale adjustments. Another permanent increase that would enter the equation in the same way is a salary anomaly adjustment.

A non-permanent increase would be external to this equation. For example, an administrative stipend, or a lump-sum payment that is not to base. Either of those would NOT be increasing salary_{t+1}. It is just an extra bit of money that the University is paying us, like a bonus.

IV. Numerical Examples:

For all examples, suppose for simplicity that

- Scale is 1%
- Selective Increase Unit (SIU) = 4,000
- Floor for your rank is 70,000
- Threshold 1 (T1) for your rank is 150,000
- Threshold 2 (T2) for your rank is 200,000
- and that your faculty has $\frac{FSIP}{\sum_{\text{fac}} Radj} = 2,000$

Example 1:

If you received a merit score (R) of 1.75, had no other adjustments, and had a base salary of 100,000 in year 1, then your base salary in year 2 would be 104,500.

104,500= 100,000*(1+0.01) + 1.75*2000

The 4,500 total salary increase you got is comprised of: The scale increase of 100,000*0.01 = 1,000, and The selective increase of 1.75*2,000 = 3,500.

Example 2:

If you received a merit score (R) of 1.75, had no other adjustments, and had a base salary of 160,000 in year 1, then because you are between T1 and T2, your Radj would be 1.75-0.75 = 1, and your base salary in year 2 would be 163,600.

163,600= 160,000*(1+0.01) + 1*2000

The 3,600 total salary increase you got is comprised of: The scale increase of 160,000*0.01 = 1,600, and The selective increase of 1*2,000 = 2,000.

Example 3:

If you received a merit score (R) of 2, are receiving an associate chair stipend of 2000, received an Outstanding Performance Award(OPA) of 4,000 (one SIU), and had a base salary of 210,000 in year 1, then because you are above T2, your Radj would be 2-1.25 = 0.75, and your base salary in year 2 would be 217,600.

217,600= 210,000*(1+0.01) + 4000 + 0.75*2000

The 7,600 total salary increase you got is comprised of: The scale increase of 210,000*0.01 = 2,100 and The selective increase of 0.75*2,000 = 1,500 and The OPA of 4,000.

Note that the associate chair stipend does NOT enter into your salary increase and is not part of the 217,600 base salary. The stipend is on top of your base salary.

So what you would actually receive in pay in year 2 is 219,600.

V. Relevant Memorandum of Agreement (MOA) passages

Note that all of the primary equations (1, 2, and 3) are "translated" from the text of our Memorandum of Agreement (MOA). For reference, the MOA text used to form these equations are listed below.

(eq.1) - is from MOA statements 13.3.3b) and 13.4.1

"The actual dollar value in any one year associated with an adjusted R of 1.0 in each Faculty is calculated by adding all individual adjusted ratings in that Faculty together, and dividing the resulting number into the total value of that Faculty's Selective Increase Pool as determined by 13.3.2. All other adjusted R values are assigned a selective increase dollar value by multiplying the adjusted R value by the dollar value of an adjusted R of 1.0."

and

"In every case, scale and selective increases shall be applied to the Member's nominal full-time salary."

(eq. 2) - is from MOA statement 13.3.3a)

"A Member's selective salary increase depends both on her/his performance rating (actual R) and on the position of the Member's salary relative to the thresholds T1 and T2 for her/his rank. Thus the performance rating (adjusted R) for purposes of calculating a Member's selective increase amount may not be the same as the performance rating (actual R) determined as specified in <u>13.5.5.</u> For Members on a biennial performance review cycle, during non-review years, actual R is equal to the actual R for the previous year. These non-review year actual Rs are subject to adjustment, just as review year actual Rs are. The appropriate values for the adjusted performance rating shall be determined in the following way:

If salary is less than T1 then adjusted R is actual R

If salary is equal to or greater than T1 but less than T2 then adjusted R is actual R less 0.75 If salary is equal to or greater than T2 then adjusted R is actual R less 1.25 The value of adjusted R shall never be less than 0"

(eq.3) – is from MOA statement 13.3.2

"Within each Faculty, the Selective Increase Pool for Members shall be determined as follows:

0.25 SIU for each FTE Member, plus

0.25 SIU for each FTE Member with salary below T2, plus

0.5 SIU for each FTE Member with salary below T1.

For these purposes the value of the SIU shall be its value as of May 1 of the salary year in which the selective increases are to take effect, adjusted from year to year as specified in <u>13.2.2.</u>"