

# Proposed Methodology for Faculty Salary Equity

Southern Illinois University Edwardsville

Faculty Senate Salary Equity Committee

Fall 2013<sup>1</sup>

## 1. Introduction

The previous (2008) faculty salary equity study (FSES) was conducted by the Office of Institutional Research along with the guidance of the SIUE Faculty Senate Executive Committee following the guidelines established by the Faculty Senate Salary Equity Task Force (SETF) report “Report and Recommendations for Assessment and Achievement of Salary Equity at SIUE,” adopted by the SIUE Faculty Senate May 3, 2007. The most recently proposed methodology for salary equity was conducted in Fall 2012, but this report has not yet been approved by the Welfare Council or the Faculty Senate.

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<sup>1</sup> Members of the Salary Equity Committee included Ariel Belasen (Business, chair), Carly Hayden Foster (Arts and Sciences), Karen Kelly (Nursing), Erik Kirk (Education), Soondo Kweon (Engineering), Dwight McLeod (Dental Medicine), Matt Paris (Library), and Erin Timpe (Pharmacy).

## 2. Peer Groups and Baseline Data Sets

The salary equity committee consulted with the Dean of each Unit to select appropriate data sets for comparison. Of particular importance was the selection of a set that matches the characteristics of each unit, i.e. via a professional organization or accrediting agency, as well as the demographics of each unit, i.e. a large, public, master's level institution.

1. The College of Arts and Sciences will use data from *The National Faculty Salary Survey by Discipline and Rank of Four-Year Colleges and Universities* (CUPA).
2. The School of Business will use data from the *Association to Advance Collegiate Schools of Business* (AACSB): Master's Colleges and Universities (large programs).
3. The School of Dentistry will use data from the *American Dental Education Association* (ADEA): Central Public Schools.
4. The School of Education will use data from CUPA.
5. The School of Engineering will use data from the *American Society of Engineering Education* (ASEE): Master's Colleges and Universities (Master's L).
6. The School of Library and Information Services will use data from the *Association of Research Libraries Annual Salary Survey* (ARL).
7. The School of Nursing will use data from the *American Association of Colleges of Nursing* (AACN): Master's Large Programs in the Midwest.

8. The School of Pharmacy will use data from the *American Association of Colleges of Pharmacy* (AACP): Public Schools.

The appendix contains specific justifications for each set.

The Salary Equity Committee will use an algorithm to calculate the requisite amount of equity needed using base salary data from the peer groups determined by the above data sets. This calculation will include a rank-level adjustment to ensure that the correct comparisons have been made (see Section 4).

### 3. Distribution of Salary Equity Funds

The money for salary equity will be distributed to the Schools or Units based on the relative share of the total salary pool for the eligible faculty. For example, suppose that the total salary required for equity for eligible faculty in School A is \$600,000, School B is \$400,000, and School C is \$1,000,000 for a total salary need of \$2,000,000. Then out of the total available funds for equity: School A would receive

$$\frac{\$600,000}{\$2,000,000} = 30\%$$

School B would receive

$$\frac{\$400,000}{\$2,000,000} = 20\%$$

and School C would receive

$$\frac{\$1,000,000}{\$2,000,000} = 50\%$$

Thus with a hypothesized allocation pool of \$1,000,000, A would receive 30% or \$300,000; B would receive 20%, or \$200,000, and C would receive 50% or \$500,000. The methodology outlined in Section 4 will explain how eligible faculty are selected.

The funds available for salary equity shall be divided into the following groups:

1. (Part I) 2% for Pension Liability and Appeals. Under Illinois law, certain increases in pension costs resulting from an individual receiving a large raise as

they approach retirement become the responsibility of the raise-granting institution (SIUE). Two percent of the total salary equity pool will be set aside in order to cover pension liability and the possibility of appeals (see section 8).

2. (Part II) 98% Distributed to Faculty for Salary Equity Adjustments. The methodology described in section 4 will be used to determine the distribution of funds for salary equity adjustments.

## 4. Methodology for Part II

The methodology for the funds distributed in Part II should be exactly the same as the most recently approved equity study except that we are now adjusting for rank and allowing for School-specific comparison groups. Details on the methodology are provided in the Faculty Salary Equity Task Force Report, but an overview of each step in the process of determining target salaries for each rank and discipline is provided here<sup>2,3</sup>.

### 4.1 Determining the Target Salaries

1. The salary equity study will include the base faculty salary of all full-time non-represented faculty employed at SIUE on October 15<sup>th</sup> of the fiscal year in which the equity study is performed. The following groups are ineligible for participation in the equity study based on their status as of the October 15<sup>th</sup> date referenced above:<sup>4</sup>
  - a. Those in the first year of an appointment.
  - b. Instructors

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<sup>2</sup> This section is based heavily on the final report to the faculty senate on the faculty equity report, March, 2008.

<sup>3</sup> Faculty will be evaluated based on the discipline used by the Office of Institutional Research. It is important to note that discipline and department are not the same. In a few cases, especially within the School of Education, there is more than one discipline within a department.

<sup>4</sup> This is not an all-inclusive list, but mentions the major groups that are excluded from the study. Final determination of inclusion in the equity study rests with the Office of the Provost.

- c. Emeritus or retired faculty
  - d. Part-time faculty
  - e. Those faculty who fail to meet the requirements as laid out in Section 5.
2. Institutional Research will collect data on faculty salaries by rank and discipline.
  3. For each School or Unit, the Faculty Senate Salary Equity Committee shall determine a target salary for each rank/discipline.
  4. The faculty of each School or Unit shall develop a procedure that will make salary adjustments to account for the discrepancy between the actual and target salaries.
    - i. Using data from the relevant database, the median of the average monthly salary would be calculated by rank. For example, suppose in a given department, if the salaries for all full professors were: \$75,000; \$80,000; \$90,000; \$110,000; \$112,000; \$115,000; and \$120,000, the median of these averages would be \$110,000. Then that median would be converted into a monthly base by dividing by 9 (or 12 for certain units) months.
    - ii. If the comparison data is from the previous year, the salary data will be inflated by the salary increase received by SIUE employees since that time. For example, if all SIUE faculty received a 2.5% raise in the most recent year, but only one-year-old data are available, then the year-old data would be inflated by 2.5% to make them comparable.
    - iii. Within each discipline/rank, salaries shall be adjusted to account for years in rank, if years in rank is not accounted for in the study used. This adjustment shall be made by supposing 2% raises for each year between the actual number of years in rank by the SIUE faculty member and the average number of years in rank for that

rank.

Based on a cursory study of the scarce available data, we assume average years in rank of 3, 7, and 10 years for the ranks of assistant professor, associate professor, and professor and adjust accordingly.

NOTE: We recommend that the Office of Institutional Research conduct a study to determine the accuracy of both the 2% raise supposition and the specific average years in rank for faculty at SIUE, or nationwide.

For illustration, suppose that a discipline has five associate professors whose salaries and years in rank are shown in the table below.

Years in Rank	Current Salary	Adjusted Salary
2	\$60,000	\$66,245
5	\$66,000	\$68,666
11	\$70,000	\$64,669
14	\$80,000	\$69,645
15	\$86,000	\$73,400

The average number of years in rank is assumed to be 7 for associate professors, so the first associate professor listed above (the one with 2 years in rank) would have his/her salary adjusted by compounding five 2% raises to his/her salary of \$60,000. Since a 2% raise can be affected by multiplying a salary by the factor of 1.02, a set of five 2% raises can be effected by multiplying the salary by 1.02, five times. The adjusted salary for the first associate professor is therefore

$$1.02 \times 1.02 \times 1.02 \times 1.02 \times 1.02 \times \$60,000 = 1.02^5 \times \$60,000$$

$$= 1.10408 \times \$60,000$$

$$= \$66,245$$

The associate professor with 15 years in rank would have an adjusted salary calculated assuming 2% raises starting from year 7 and extending to year 15. This is accomplished by successively dividing his/her salary by 1.02 eight times (15 minus 7), yielding an adjusted salary of

$$\frac{\$86,000}{1.02 \times 1.02 \times 1.02 \times 1.02 \times 1.02 \times 1.02 \times 1.02 \times 1.02} = \frac{\$86,000}{1.02^8}$$

$$= \$73,400$$

The other associate professors would have their salaries adjusted in a similar fashion. Before adjusting the salaries, the median salary was \$70,000; after adjustment, the median salary is \$68,666. Since this discipline has a number of “senior” associate professors, that is, those who have been in rank for a long time, the adjustment procedure has the effect of lowering the median salary making it likely that these associate professors would get larger equity raises. This adjustment procedure should lead to fairer comparisons, since we are adjusting everyone’s salary to “seven years in rank” when we compare the median salary in the discipline to the target salary (which was likely computed with an average of about seven years in rank).

- b. The target monthly salaries by rank and discipline would then be compared to the actual SIUE average monthly salary by rank and discipline to determine the level of inequity. For example, if there are two full professors in a given department at SIUE of equal years in position, one earning \$100,000 and one earning \$95,000, their average salary would be \$97,500, and assuming that they have a 9-month appointment, the monthly salary would be \$10,833. If the comparison monthly salary is \$11,000, then they would be \$167 below their comparison group.

## 5. Minimum Performance Standards for Receiving Salary Equity Adjustments

Faculty members who receive an overall performance evaluation of an overall rating of *Unsatisfactory* (or equivalent) over the most recent three-year average shall be ineligible for salary equity adjustments.

## 6. Appeals

Appeals will only be granted in the case of error in either the individual's current salary or the target salary calculation. To appeal their result of the equity study the individual must provide written evidence of the error to his or her dean within 60 days of notification of the adjustment. If the dean or his/her designee decides that an error has been made, the appeal will be forwarded to the Office of the Provost, where, in consultation with the Office of Institutional Research, a final decision on the appeal will be made. If the individual wishes to appeal the result beyond the dean, the appeal must be sent to the Office of the Provost within 60 days of notification from the dean. The decision of the Provost's Office will be final.

## Appendix: Justifications for Data Sets

### College of Arts and Sciences

**Data Set Requested:** *The National Faculty Salary Survey by Discipline and Rand of Four Year Colleges and Universities* from the College and University Professional Association (CUPA)

**Justification for using CUPA:** CUPA collects salary data from a wide range of participating universities. CAS proposes to utilize salary data from the 153 Master's Granting Public Institutions participating in the 2013 CUPA survey.

**Justification for using CUPA Master's level data:** The CUPA data set has the advantage of being the most inclusive and broad ranging collection of academic salary data currently available. Given that CAS is the largest and most diverse unit at SIUE, CAS should be permitted to utilize the CUPA data for salary comparison purposes.

### School of Business (SOB)

**Data Set Requested:** Association to Advance Collegiate Schools of Business (AACSB) salaries of full-time business faculty by position, rank, and years at Master's Colleges and Universities (larger programs).

**Justification for not using CUPA:** SIUE's SOB is one of a select number of schools of business (fewer than 10% worldwide) that is accredited by AACSB. CUPA's data set includes far more unaccredited programs than accredited ones and thus does not serve as a fair and equitable comparison set.

**Justification for using AACSB Master's level data:** Rather than using the overall data set which, again, would be unrepresentative of our SOB, we elect to go with the best comparison which is reflected by the Master's Colleges and Universities (larger programs). This means we are looking at roughly the middle third of the AACSB data (27% come from small programs and 42% from Doctoral programs). By omitting schools from these two groups we will get a much more accurate salary comparison.

### **School of Dental Medicine (SOD)**

**Data Set  
Requested:**

American Dental Education Association (ADEA) Salaries of full-time dental medicine faculty by rank and years in rank for calendar-year appointments at public institutions.

**Justification for  
not using CUPA:**

From the list of IBHE peer institutions in the national faculty salary survey in 2005-2006, there was only one public institution with a dental school that was represented. Also, the survey did not distinguish between the salaries/employment structure of clinical and biomedical faculty, which vary by geographic regions.

**Justification for  
not using IBHE  
masters public  
institutions data  
set from CUPA:**

From the list of IBHE large masters public institutions in the CUPA data set that provided salary data in 2012, only one dental school was included in the peer group. Also, the CUPA data set does not account for the differences in salaries and employment structure of biomedical and clinical faculty.

**Justification for  
using ADEA  
calendar year  
public institution  
by rank data:**

Biomedical and clinical faculty at the SOD have a different salary structure, and both groups are on a 12 month appointment. Biomedical faculty are compensated at a lower salary scale than clinicians. The ADEA data set separates the salaries of biomedical and clinical faculty and represents the “fair” market salaries of clinical/biomedical faculty by geographic regions. The “specific ADEA data subset” that will be utilized to represent the salaries of clinical and biomedical faculty at the SOD is the “Guaranteed Annual Salary of Full-Time Faculty by Primary Appointment and Region”. The Central Region data will be used to allow for a more equitable salary adjustment for both biomedical and clinical faculty.

### **School of Education (SED)**

**Data Set  
Requested:**

*The National Faculty Salary Survey by Discipline and Rank of Four Year Colleges and Universities* from the College and University Professional Association (CUPA)

**Justification for  
using CUPA:**

CUPA collects salary data from a wide range of participating universities. SED proposes to utilize salary data from the 153 Master's Granting Public Institutions participating in the 2013 CUPA survey.

**Justification for  
using CUPA  
Master's level  
data:**

The CUPA data set has the advantage of being the most inclusive and broad ranging collection of academic salary data currently available. Given that SED is a large and diverse unit at SIUE, SED should be permitted to utilize the CUPA data for salary comparison purposes.

### **School of Engineering (SOE)**

**Data Set  
Requested:**

American Society of Engineering Education (ASEE) salaries of full-time engineering faculty by position, rank, and discipline at Master's Colleges and Universities (Master's L).

**Justification for  
using ASEE  
Master's level  
data for public  
universities:**

ASEE provides a better comparison by identifying similar engineering programs (Master's Colleges and Universities). The data are broken down by position, rank, and discipline.

### **School of Library and Information Services (LIS)**

<b>Data Set Requested:</b>	Library and Information Services (LIS) requests to use data from the American Research Libraries Annual Salary Survey (ARL) for the purposes of arriving at relevant comparable target salaries.
<b>Justification for not using CUPA:</b>	The CUPA survey collects data from those faculty members teaching library science rather than current practitioners. Almost all faculty librarians are on 12 month rather than nine month contracts. Faculty librarian administrators are listed as Deans or Directors while library science teaching administrators are usually listed as Department Heads.
<b>Justification for using ALA data:</b>	ARL collects salary data from a wide range of participating institutions. LIS proposes to utilize salary data from the 149 academic libraries participating in the 2013 ARL survey. The ARL data set has the advantage of being the most inclusive and broad ranging collection of academic library salary data currently available.

## School of Nursing (SON)

Data Set Requested:	The American Association of Colleges of Nursing completes a faculty/administrator salary survey annually. The AACN is the parent organization of our accrediting body, the Commission on Collegiate Nursing Education (CCNE).
Justification for not using CUPA:	The IBHE peer institutions include a range of public universities around the country. Nursing salaries in general widely vary by geographic region and by rural vs. urban areas; this variance also applies to faculty salaries. Furthermore, the SON now offers a doctoral degree (doctor of nursing practice/DNP) and no longer offers only a graduate degree in nursing.
Justification for not using IBHE masters public institutions data set from CUPA:	The same limitation noted above applies to the IBHE masters public institutions related to the geographic region and urban vs. rural variance of nursing salaries. The DNP program also differentiates the SIUE SON from other programs that offer the graduate degree as the highest degree in their curricula. There are two accrediting bodies for nursing programs in colleges and universities. Some of the masters public institutions from the CUPA set may be accredited by the Accreditation Commission for Education in Nursing (formerly the National League for Nursing Accreditation Commission). While the standards for nursing education from the two bodies are similar, there are differences in philosophies of the two bodies that may be reflected in the composition of the faculty. CUPA data may also include some schools that offer the associate degree in nursing in concert with a BSN completion program, instead of the traditional pre-licensure BSN program as offered by the SIUE SON.
Justification for using AACN doctoral programs/AACN Midwestern programs by rank data:	The school of nursing faculty are largely on nine (9) month contracts with summer contracts for summer courses taught in the undergraduate, graduate, and DNP programs. Administrative faculty are on 12 month contracts. Comparison with AACN doctoral programs and AACN Midwestern programs ensures comparison with schools of nursing most like the SIUE SON by program type and by region. The data allow comparison with other public universities.

## **School of Pharmacy (SOP)**

<b>Data Set Requested:</b>	American Association of Colleges of Pharmacy (AACP) Salaries of full-time pharmacy faculty by rank and years in rank for calendar-year appointments at public institutions.
<b>Justification for not using CUPA:</b>	From the list of IBHE peer institutions in the national faculty salary survey in 2005-2006, there were only five institutions with schools of pharmacy (Drake, Duquesne, SUNY Buffalo, UNLV, and University of Nebraska) and two of these are private institutions. Two of the other three institutions are doctoral institutions. The private institutions likely increased the salary comparisons for the SIUE SOP in the last salary equity given.
<b>Justification for not using IBHE masters public institutions data set from CUPA:</b>	From the list of IBHE large masters public institutions in the CUPA data set that provided salary data in the last year available, 2012, there are only four institutions with schools of pharmacy (Ferris State University, Southwestern Oklahoma State University, Texas Southern University, and University of Nebraska at Omaha).
<b>Justification for using AACP calendar year public institution by rank data:</b>	All faculty in the SOP are on calendar-year appointments due to teaching requirements through the summer. Similar to justification above, and because of the degree offered, the doctor of pharmacy, few schools of pharmacy are located in masters public institutions. There is no national data broken down by masters versus doctoral programs because all schools of pharmacy have a doctor of pharmacy as the degree awarded. Data is also not broken down by geographical area. The smallest breakdown in data is by public versus private institutions.