## MEMORANDUM

Date: $\quad$ March 23, 2017
TO: All Faculty Senate Members
FROM: Keith Koons
Chair, Faculty Senate
SUBJECT: Faculty Senate Meeting on March 30, 2017

Meeting Date: $\quad$ Thursday, March 30, 2017
Meeting Time: $\quad$ 4:00-6:00 p.m.
Meeting Location: Student Union Key West, Room 218

## A G ENDA

1. Call to Order
2. Roll Call
3. Approval of Minutes of February 23, 2017
4. Announcements and Recognition of Guests
5. Report of the Provost
6. Old Business

None.
7. New Business

- Resolution 2016-2017-17 Faculty Senate Bylaw Change, Restore Section IV.I. Resolutions
- Resolution 2016-2017-18 Abbreviated Cumulative Progress Evaluation (CPE) Requirement for Promotion to Full Professor
- Resolution 2016-2017-19 Opposition to Replacement of Foreign Language Classes by Computer Coding in Florida High Schools
- Gender Equity Study - Linda Sullivan


## 8. Committee Reports

- Budget and Administrative Committee - Pradeep Bhardwaj
- Personnel Committee - Stephen King
- Parking Advisory Committee - Ahmad Elshennawy
- Undergraduate Council - Kelly Allred
- Graduate Council - Jim Moharam

9. Other Business
10. Adjournment

## Resolution 2016-2017-19 Opposition to Replacement of Foreign Language Classes by Computer Coding in Florida High Schools

Whereas, the 2017 Florida Legislature may consider Senate Bill 104, the Computer Coding bill, which would in the academic year 2019-2020 allow high school students to substitute computer coding classes for foreign language classes (2 credits); and

Whereas, currently high school foreign language credits are considered part of the application for undergraduate admissions at UCF; and

Whereas, UCF supports international cooperation, understanding, and partnerships by virtue of President Hitt's third goal: "Provide international focus to our curricula and research programs;" and

Whereas, UCF seeks to increase international mobility and enhance the university's global competency by the recent opening of UCF Global; and

Whereas, foreign language study develops a person's appreciation and understanding of cultures and people across the world; therefore

Be It Resolved that the UCF Faculty Senate opposes the effort to replace foreign language classes with computer coding in Florida high schools.

# FACULTY SALARY EQUITY STUDY 

An analysis of 2016 salaries among UCF faculty members

[^0]REPORT PREPARED BY INSTITUTIONAL KNOWLEDGE MANAGEMENT
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## EXECUTIVE SUMMARY

## INTRODUCTION

The following report represents findings from a study conducted in March 2017 exploring differences in salaries of UCF faculty employed in 2016. This research was informed by faculty salary equity studies conducted at UC Berkeley, UC Riverside, and others.

This study consists of a single year "snapshot" of faculty salaries to consider differences by gender and ethnicity. It does not analyze salary changes over time among faculty and it does not intend to provide an exhaustive list of the factors that contribute to salary differences.

## METHODS AND ANALYSES

Descriptive analyses as well as a nested linear regression were performed in order to explore the independent and multiplicative effect of various factors on annual salary. The main dependent variable used was the natural logarithm of the 9 -month (or equivalent) salary among faculty members. Predictor variables of interest include demographic characteristics (gender and race/ethnicity), measures of experience (e.g. rank, tenure status, time at UCF, number of ranks held), structural factors (college/department and employee class), and merit-based factors (e.g. administrative responsibilities and teaching/research awards received).

## FINDINGS AND DIRECTIONS FOR FUTURE RESEARCH

Findings indicate that the UCF faculty is disproportionately male and disproportionately white. Descriptive analyses suggest that, as a group, women of each ethnicity make less than their male counterparts. Additionally, underrepresented minorities, international faculty, and whites make less than Asian faculty members. Descriptive analyses also indicate that the colleges with the highest median salaries are more likely to be male-dominated including the College of Optics and Photonics, the College of Business Administration, and the College of Engineering. On the other hand, those with lower median salaries tend to be more female-dominated, such as the College of Health and Public Affairs, the Rosen College of Hospitality Management, and the College of Nursing.

The nested linear regression identified gender as a consistent predictor of salary differences, with female faculty members typically earning about $5 \%$ less than males, with all other factors held constant. Similarly, underrepresented minorities earn $3.5 \%$ less than white faculty, holding all other variables constant. However, there were also a number of differences related to college, department, merit, and experience that were more substantial predictors of differences in faculty salaries.

It is also important to note that the findings from this study are exploratory in nature, given that a number of additional unmeasured factors may play a role in salary and advancement. Similarly, existing research suggests that the role of gender in salary differences may be more of a latent effect of tracking into different fields, work/life balance, etc. These factors contribute to women and minorities' disproportionate representation in ranks and fields of study which may have a more overt impact on salary differences.

It is important that future research and campus initiatives continue to explore the experiences of women and minorities on campus, as well as perceived barriers, the interactive effect of multiple characteristics, and the ways in which seemingly objective measures of salary determination may themselves be "gendered".

## BACKGROUND

The following is a preliminary exploration into faculty salaries by gender and ethnicity at the University of Central Florida. This research is being guided by studies conducted at UC Berkeley (2015), UC Riverside (2014), and others, with modifications made to reflect the UCF community and available data.

All data presented here is based on salaries and faculty roles for the 2016-17 academic year, excluding any retroactive increases applied after November 2016. This study consists of a single year "snapshot" of faculty salary by gender and ethnicity. It does not analyze salary changes over time among faculty members, nor is it to be considered an exhaustive analysis of the factors that contribute to salary rates and differences.

## SAMPLE

A total of 1,606 faculty members are included in this analysis including 1,519 professors, instructors, and lecturers in the ten UCF colleges as well as those teaching at the various UCF research institutes and centers. Additionally, 87 faculty members are considered administrators, and range from the president and vice president of the university to college deans and directors.

All faculty members were included in the sample if they had a reported salary record for the year 2016 in the EEO database and were employed in a faculty role at that time, regardless of other ranks, classes, or job codes held at UCF prior to 2016. Salary, demographics, and other information on faculty members was pulled from the Equal Employment Opportunities database. In order to ensure data integrity, some information on longstanding employees, aside from their original date of hire, is not available prior to 2006. Therefore, information regarding length of time in current position, number of awards received, etc. will only reflect records for the past ten years, regardless of how long the employee has been with UCF.

Table 1: Count of Faculty by Gender and Ethnicity

| Ethnic Category | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| White | 514 | 638 | 1,152 |
| Asian | 53 | 143 | 196 |
| Underrepresented Minority a | 95 | 89 | 184 |
| International | 24 | 50 | 74 |
| Total | 686 | 920 | 1,606 |
| a includes those identifying as Black/African American, Hispanic or Latino, <br> American Indian, Alaska Native, or multi-racial |  |  |  |

Slightly more than half of the UCF faculty are male (57\%), and regardless of gender, faculty members are predominantly white (72\%). Table 1 depicts the number of faculty members included in this study based on gender and ethnicity.

The average age of faculty at UCF is approximately 50 years old and range from 24 to 86 years of age. Administrators have the highest average age at 59 , while faculty at institutes and centers have the lowest average at 43 years. College of Arts and Humanities faculty have the widest age range (24-85), while College of Nursing has the smallest age range among faculty (36-72 years).

Overall, approximately $78 \%$ of the UCF faculty have a doctorate or equivalent degree. $100 \%$ of faculty in the College of Optics and Photonics, and $95 \%$ of faculty in the College of Engineering and Computer Science, have earned a doctorate or equivalent. On the other hand, $55 \%$ of faculty in the College of Arts and Humanities have a doctorate or equivalent.

Faculty employed in 2016 have been employed at UCF in some capacity for an average of 9.5 years. Approximately $10 \%$ of the faculty included in this sample were hired in 2016, while $50 \%$ of the faculty have been with UCF between one and ten years. The remaining $40 \%$ have been with UCF between 11 and 47
years. Faculty employed as administrators have been at UCF for an average of 14 years, while faculty in the College of Nursing and in institutes and centers have been with UCF for an average of five years.
$12 \%$ of the faculty included in this sample were serving an administrative role of some sort. Slightly less than half of that group (44\%) are considered part of the Administration category for the purpose of this analysis, based on their specific administrative roles.

Fewer than $2 \%$ of the faculty were employed less than full-time in 2016, and approximately $16.4 \%$ of the faculty were employed on 12-month contracts. All salaries reported here include 9 -month equivalency for 12-month based employees.

## DATA AND METHODS

## OUTCOME VARIABLE

The main outcome variable includes the reported 9-month salary for 2016 for each faculty, as reported in the Equal Employment Opportunities database. Salaries were converted to a 9-month equivalent amount for faculty members on 12-month contracts. Multivariate analyses consider the natural logarithm of the annual salary, which is used to more closely represent a normal curve in the distribution. As a result, the current examination reports on the multiplicative effect of the variables of interest described below.

## PREDICTOR VARIABLES

The predictor variables of interest to the current examination include:
Measures of Demographics include gender (male and female) and race/ethnicity. The race/ethnicity variable was coded into four categories including White, Asian, Underrepresented Minority, and International. Underrepresented minorities include faculty identified as Black/African American, Hispanic or Latino, American Indian, Alaska Native, or multi-racial. International faculty include all faculty reported in TABLE SOURCE as "Non-Resident Alien." The multivariate model also includes an interaction effect between gender and race.

Measures of Experience include number of years since faculty member earned their highest degree (range: 0 - 54 years), current rank (professor, associate professor, assistant professor, or instructor/lecturer), current tenure status (tenured, tenure-earning, non-tenure-earning), number of ranks held (range 1-3), and the number of years the faculty has been employed at UCF (range: $0-47$ years). The number of years at UCF represents the years that have elapsed between the faculty member's first date of hire and the year 2017. This does not necessarily represent the first date of hire as a faculty member, but rather includes their entire time spent at UCF. Additionally, due to limited availability of data, the number of ranks held do not account for changes that may have occurred prior to 2006 for faculty that have been employed for more than ten years.

Measures of UCF Structure include the faculty member's college and home department as well as their employee class. College deans, associate deans, and those with the administrative description of "director," such as those directing a center or degree program are included as administrators, regardless of their college. Statistical analyses were used to identify salary differences between departments within each college. When no differences were identified, faculty were coded by their college. When differences were identified, the college and home department were taken into consideration in the multivariate model. Appendix B outlines the process of identifying these differences. Appendix A also includes charts describing the median salary and percent of women within each department and college. Based on proportion
distribution, employee class is dichotomized into two groups: clinical or research faculty and regular or visiting faculty.

Measures of Merit and Barriers include whether the faculty is currently serving in an administrative position (Yes or No), representing faculty serving as department chairs, provosts, coordinators, program directors, etc. The total number of TIP and RIA awards earned is also included. Due to limited availability of data, TIP and RIA awards earned by faculty members before the year 2006 are not included in this analysis. The number of times faculty have been away on paid leave (since 2006) is also included in the model for periods of time away from work. This variable does not include regular annual or sick leave awarded to faculty members but rather serves as a proxy for time off for sabbaticals, parental leave, etc. Due to data limitations, these leave types are not differentiated in the current model.

## ANALYSES

Descriptive, bivariate, and multivariate quantitative methods were used to analyze factors correlated with faculty salaries for the 2016-17 academic year. Appendix A includes a breakdown of descriptive analyses by college including proportions of faculty by race and gender as well as median income among college departments. The multivariate model consists of a nested linear regression of the logarithms of faculty members' annual salaries. Appendix B includes a detailed description of the analysis and modeling approaches and Appendix C includes a detailed table of findings of significance for each variable included in the nested model. Below, Table 2 outlines the four models included in the nested linear regression analysis used in the current examination.

Table 2: Nested Multivariate Linear Regression Model Outline

|  | Model 1 <br> Demographics | Model 2 <br> Experience | Model 3 <br> Structural | Model 4 <br> Merit/Barriers |
| :--- | :---: | :---: | :---: | :---: |
| Gender | x | x | x | x |
| Race/Ethnicity | x | x | x | x |
| Gender x Race/Ethnicity | x | x | x | x |
| Years at UCF | x | x | x |  |
| Years since highest degree earned |  | x | x | x |
| Current Rank | x | x | x |  |
| Current Tenure Status | x | x | x |  |
| Total Number of Ranks Held | x | x | x |  |
| College (or College + Department) |  |  | x | x |
| Employee Class |  | x | x |  |
| Currently Serving Admin Role |  |  | x |  |
| Total number of TIP + RIA earned |  |  |  | x |
| Number of times paid leave taken |  |  |  | x |

## RESULTS

## DESCRIPTIVE ANALYSIS

Median salaries of faculty members sorted by gender and race/ethnicity indicate that there are some differences between groups. The median salary among men, regardless of ethnicity, is approximately $\$ 20,000$ greater than the median salary of women. Median salaries for men were consistently higher than women in the same ethnic category, with differences ranging from $\$ 8,000$ to $\$ 31,000$. Similarly, Asian faculty members had the highest median salary, while underrepresented minorities had the lowest median salaries, regardless of gender.

Salary differences also emerged among faculty by college. The faculty groups whose median salary exceeded $\$ 100,000$ in 2016 include: administrative faculty, College of Business Administration (CBA), College of Optics and Photonics (CREOL), College of Medicine (COM), and College of Engineering and Computer Science (CECS). The proportion of women employed in each of these groups

Table 3: Median 9-Month Faculty Salary by Gender and Ethnicity

| Ethnic Category | Female | Male | Total |
| :--- | :---: | :---: | :---: |
| White | $\$ 69,699$ | $\$ 88,026$ | $\$ 78,010$ |
| Asian | $\$ 78,730$ | $\$ 109,619$ | $\$ 104,629$ |
| Underrepresented Minority a | $\$ 66,000$ | $\$ 84,747$ | $\$ 74,421$ |
| International | $\$ 67,705$ | $\$ 75,976$ | $\$ 75,047$ |
| Total | $\$ 70,000$ | $\$ 90,096$ | $\$ 79,561$ |
| a includes those identifying as Black/African American, Hispanic or Latino, American <br> Indian, Alaska Native, or multi-racial |  |  |  | range from $7 \%$ to $43 \%$.

On the other hand, the faculty groups with the lowest median salaries include: College of Nursing (CON), Rosen College of Hospitality Management (RCHM), College of Education and Human Performance (CEDHP), College of Health and Public Affairs (COHPA), and College of Arts and Humanities (CAH). The proportion of women in each of these groups range from $46 \%$ to $85 \%$, indicating that the colleges with the lowest median salaries are more likely to be female-dominated than those with the highest median salaries.


## MODEL RESULTS

Each of the models presented below highlight the independent effects of multiple factors that may contribute to salary differences among faculty at UCF. The effect of each variable assumes that all other factors are held constant. For example, a comparison between male and female would indicate that those two professors are at the same rank, in the same department/college, ethnicity, and so on, where their only distinguishing difference would be their gender. Additionally, only variables that were statistically significant are discussed below. See Appendix C for an illustration of the complete regression model and variable significance.

In each of the models below, categorical groups are compared to a "reference group" for analyses. Table 4 outlines the corresponding reference group whom each group is compared to.

Table 4: Reference Groups in Multivariate Analyses

| Category | Analysis Group | Reference Group |
| :--- | :--- | :--- |
| Gender | Female | Male |
| Race | Asian <br> International <br> Underrepresented Minority | White |
| Race $\times$ Gender | Asian $\times$ Female <br> International $\times$ Female <br> Underrepresented x Female | White Male |
| Rank | Instructor/Lecturer <br> Assistant Professor <br> Associate Professor | Full Professor |
| Tenure Status | Tenure-Track <br> Non-Tenure-Earning | Tenured |
| College/Department | e.g. CAH/English <br> Faculty Type | Clinical or Research <br> Currently serving admin Role | | A\&P Regular or Visiting |
| :--- |
| Admin Status |

It is important to note that the bar charts in this section only represent variables that are statistically significant or approaching significance ( $p<.10$ ). See Appendix $C$ for the complete regression model, variable significance, and reference groups noted.

## MODEL 1: DEMOGRAPHY

Model 1 compares faculty salary based only on gender and race/ethnicity. While the model was significant, gender and race only explain $8 \%$ of salary differences, indicating that gender and ethnicity alone do not provide a clear picture of salary differences. Regardless, gender and ethnicity are important predictors of salary, according to this model. The chart presented here indicates the variables that were significant in Model 1.

## Model 1: Significant Contributors to Salary Differences



In 2016, Asians earned $23 \%$ more than whites and women earned 19\% less than men. Interestingly, international faculty earned about $12 \%$ less than white faculty, while international females in particular earned about $19 \%$ more when compared to white men. However, as models two through four will demonstrate, introducing additional attributes into the model decreased the gap between salaries by gender and ethnicity.

MODEL 2: EXPERIENCE
Model 2 adds faculty experience into the model with gender and race/ethnicity. Model 2 explains approximately $56 \%$ of salary variations, which is substantially higher than Model 1, but indicates that there are still additional factors that are considered in determining salary.

As indicated in the chart provided in this section,

Model 2: Significant Contributors to Salary Differences
 faculty rank supersedes gender and ethnicity as a major contributor to salary differences. In particular, instructors/lecturers earned $59 \%$ less than full professors. Assistant professors earn about $38 \%$ less than full professors, and associate professors earned about $28 \%$ less than full professors.

As Model 2 indicates, women earned about $4 \%$ less than men when rank is introduced into the model. Underrepresented minorities also earned $4.5 \%$ less than whites, while Asians earned about $8.5 \%$ more than white faculty. International females continued to earn more than white males (13\%). On the other hand, Asian females earn about $6 \%$ less than white males (approaching significance at $p=0.095$ ).

Interestingly, when current rank is held constant, faculty who progressed through multiple ranks during their time at UCF tend to have a slightly lower salary ( $7 \%$ less) than faculty who entered UCF at the higher rank.

## MODEL 3: STRUCTURAL

Model 3 introduces structural characteristics, namely the faculty's college/department and employee class. The factors included in Model 3 explain approximately $66 \%$ of variation in salary. Rank continued to be a significant predictor of salary differences with instructors/lecturers earning $51 \%$ less than full professors, assistant professors earning $35 \%$ less than full professors, and associate professors earning $27 \%$ less than full professors.

However, certain colleges/departments presented larger gaps in salaries. For instance, faculty in the Accounting department as well as Finance and Real Estate faculty earned $79 \%$ more than the average UCF faculty. Professors in the Marketing department earned $77 \%$ more than the average UCF faculty, and Clinical Science professors in the College of Medicine earned $76 \%$ more than the average UCF faculty. College of Arts and Humanities faculty in Performing Arts, Philosophy, Writing and Rhetoric, and Modern Language and Literature earned about $25 \%$ less than the average UCF faculty member. Administrative faculty had a higher salary than the average faculty member by about 43\%.

Additionally, compared to regular or visiting faculty, professors who are considered clinical or research faculty members had a 14\% higher salary. Model 3 also indicates that holding experience and department structures constant, female faculty continued to earn 3\% less than males.

Model 3: Significant Contributors to Salary Differences

## Salary Differences



## MODEL 4: MERIT / BARRIERS

The final model incorporates proxies for merit/barrier based factors that may contribute to salary differences, including whether or not the faculty is serving in an administrative role, the number of times they have taken long periods of paid leave, and the number of TIP and RIA awards they have earned in the past ten years. Model 4 explains $70 \%$ of variation in salary among faculty members. While this leaves approximately $30 \%$ unexplained (which likely include factors that are unmeasurable with the current data set), the full model is the best fit of those presented here.

Faculty in administrative roles earn approximately $26 \%$ more than those with no administrative position. Also, an increase in the number of TIP and/or RIA awards correlates to a $9 \%$ increase in salary. Interestingly, an increase in the number of times using paid leave correlates with a $2 \%$ higher salary, indicating that this is more consistent with sabbaticals or other merit-based leave rather than a family leave barrier.

Despite these additional factors, faculty rank and some colleges/departments remain correlated with larger gaps in salary among faculty. For instance, in Model 4, faculty in Accounting, Finance and Real Estate, and Marketing in the College of Business earned 70-80\% more than the average UCF faculty. Clinical Sciences faculty in the College of Medicine earned $68 \%$ more than the average faculty member.

Instructors/lecturers continued to earn substantially less than full professors (47\%), followed by assistant professors (30\%), and associate professors (23\%). Clinical or research faculty earned about $17 \%$ more than regular or visiting faculty.

In the final model, Asian faculty members earned $5 \%$ more than white faculty, while underrepresented minorities earned $3 \%$ less than white faculty members. The salary of female faculty members was $5 \%$ lower than that of male faculty members, yet international females earned about 10\% more than white males.

Model 4 indicates that a number of differences related to college, department, merit, and experience contribute to faculty salaries. However, holding all of these factors constant, women and underrepresented minorities continue to earn slightly less, on average.

## (MODEL 4 CHART ON NEXT PAGE)

Model 4: Significant Contributors to Salary Differences

## Salary Differences



## CONCLUSION

In sum, throughout the study presented here, gender remained a significant factor in salary differences. As the research models became more complex, gender played a smaller role as a factor related to salary, yet results indicate that, holding all other factors constant, female faculty members made about $5 \%$ less than their male counterparts in 2016.

It is also important to note that the findings from this study are exploratory in nature, given that a number of additional unmeasured factors may play a role in salary and advancement.

For instance, throughout this study, rank was identified as an important predictor of salary. As cited in the UC Berkeley Salary Equity Study (2015), faculty rank may reflect overt or latent biases within an institution, college, or department, as well as academia at large. Despite gains in recent decades, women and minorities remain underrepresented in academia and among tenured faculty (Menges and Exum, 1983; Deutsch \& Yao, 2014). Research has also identified ways in which women disproportionately experience wage penalties known as the "Motherhood Penalty" (Budig \& England, 2001) and are more likely to experience other work/life balance issues that may impede their ability to meet workplace standards for competitive advancements (Sullivan, 2014).

While this may not be an overt penalty, women disproportionately take on the responsibilities of childcare and providing care to relatives and other home responsibilities, on average. This may result in fewer opportunities to take on additional leadership roles, publish papers, or dedicate more time to the workplace, which then has a latent effect of appearing less productive or committed to the workplace. These issues may affect women prior to their employment at UCF or during their time at this institution. As a result, women may advance in rank at a slower rate or not get selected for promotion or additional administrative responsibilities as a result of potential differences in seemingly objective measures.

Similarly, women and minorities are disproportionately represented in fields of study that may have a more overt impact on salary differences. For example, the colleges at UCF with the highest median salaries are also among those with the smallest proportion of women faculty, while the colleges with the lowest median incomes tend to have much greater proportions of women faculty. While it may be easy to explain salary differentiations between engineering and arts faculty, it is important to consider how these arenas are themselves "gendered".

Unfortunately, the current study does not include an analyses of subjective measures of work/life balance, nor did available data provide the research team with the opportunity to explore faculty productivity measures such as publications, presentations, etc. (Claypool, Janssen, Kim \& Mitchell, 2017). Future research is needed to identify differences between men and women in terms of the number of TIP and RIA awards received, the use of paid leave, administrative roles, and other factors that may have a more direct effect on salary differences presented here.

While this study did include analyses related to gendered proportions in various colleges and departments, it is impossible to identify how some individuals or groups are "tracked" in certain directions over others. Research and community efforts within UCF as well as on a broader scale increasingly make efforts to engage girls and women in STEM fields, however, the effects of these changes and potential impact on salary differences by gender are unmeasurable in the current study.

In closing, despite other factors emerging as more important determinations of salary, gender remains a significant factor in salary at UCF. Similarly, differences in salary and the underrepresentation of various
racial and ethnic groups indicate that additional research is needed to explore the correlation and impact of these differences.
While institutions are not likely to overtly determine salary based on gender and race, these factors likely play an impact on the more "objective" measures that contribute to salary more directly, such as field, time in rank, and productivity. Additionally, further research is needed to identify the interaction between multiple variables in addition to the independent effects explored here in order to develop a more complex understanding of the factors that contribute to salary differences at UCF.

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## APPENDIX A - SALARY SUMMARIES BY COLLEGE

## ADMINISTRATION (ADMIN)

Approximately $62 \%$ of the administrative faculty are male, however Academic Affairs/Provost faculty are more likely to be female ( $56 \%$ ) than college deans and directors ( $37 \%$ ). The administrative staff is disproportionately white, with


## COLLEGE OF ARTS \& HUMANITIES (CAH)

Approximately $52 \%$ of the CAH faculty are female, making it the most gender equal UCF College, overall. However, the Modern Languages and Literature (74\%), History (60\%), Writing and Rhetoric (56\%), and English (54\%) faculty have a female majority. CAH faculty are disproportionately white, with underrepresented minorities, International, and Asian faculty representing approximately $22 \%$ of the college.

The median salary in the College of Arts and Humanities faculty is approximately $\$ 61,039$. Faculty members who are program directors or assigned additional responsibilities have the highest median salary, followed by faculty in the English department. Modern Languages and Literature and Writing and Rhetoric faculty have the lowest median salaries.


## COLLEGE OF BUSINESS ADMINISTRATION (CBA)

Approximately $72 \%$ of the CBA faculty are male, however faculty in the Accounting department are more likely to be female ( $47 \%$ ) than in any other CBA department. CBA faculty are also disproportionately white, with underrepresented minorities and Asian faculty representing less than $20 \%$ of college.

The median salary of College of Business faculty is approximately $\$ 142,191$. Finance and Real Estate faculty members have the highest median salary for 2016 ( $\$ 175,000$ ) while the median salary of Integrated Business and Sports Business faculty is approximately $42 \%$ of the finance faculty's median salary.


## COLLEGE OF EDUCATION AND HUMAN PERFORMANCE (CEDHP)

Approximately $67 \%$ of the CEDHP faculty are female, however approximately $75 \%$ of the faculty in the Teaching, Learning, and Leadership department are female. A majority of the faculty members are white, with underrepresented minorities, Asians, and International faculty representing approximately $22 \%$ of the college.


The median salary of College of Education and Human Performance faculty is approximately $\$ 70,014$. Faculty in the Department of Child, Family, and Community Sciences had the highest median income compared to the other two departments $(\$ 85,098)$. Meanwhile, there was minimal difference between the median salaries in the Educational and Human Sciences $(\$ 67,229)$ and the Teaching, Learning, and Leadership $(\$ 65,944)$.


## COLLEGE OF ENGINEERING AND COMPUTER SCIENCE (CECS)

Approximately $86 \%$ of the CECS faculty are men. The department of Computer Science has the highest proportion of women (20\%), however, representation of women is limited throughout the college. The College of Engineering and Computer Science is relatively more diverse compared to some of the other colleges at UCF. Approximately $35 \%$ of the faculty are Asian, 11\% are international, 8\% are underrepresented minorities, and only $46 \%$ of the faculty are white.

The median salary of CECS faculty is approximately $\$ 104$, 215. The difference between the department with the highest median salary (Materials Science and Engineering $\$ 116,736$ ) and the department with the lowest median salary (Civil, Environmental, and Construction Engineering $\$ 93,710$ ) is slightly more than $\$ 20,000$.


## COLLEGE OF HEALTH AND PUBLIC AFFAIRS (COHPA)

Women comprise approximately $57 \%$ of COHPA faculty. Faculty in the School of Social Work ( $85 \%$ ) and those categorized as "Other" (including Public Affairs professors paid through the dean's office) ( $75 \%$ ) are the most female-dominated departments, followed by Communication Sciences and Disorders faculty ( $64 \%$ ). The department of Criminal Justice has the largest proportion of men in COHPA ( $60 \%$ ). Approximately $80 \%$ of COHPA faculty are white. An additional $13 \%$ of the
 faculty are underrepresented minorities.

The median faculty salary in the College of Health and Public affairs is approximately $\$ 70,000$. Faculty classified as "other" have the highest median salary ( $\$ 100,000$ ) and likely include faculty assigned to special projects or have additional responsibilities. Communication Sciences and Disorders faculty have the next highest median salary in COHPA $(\$ 78,362)$, while faculty in the School of Social Work have the lowest median income ( $\$ 64,122$ ). Interestingly, all three of these departments are female-dominated, however, social workers are the most disproportionately female in the College of Health and Public Affairs.


## ROSEN COLLEGE OF HOSPITALITY MANAGEMENT (RCHM)

RCHM is the second most evenly divided college by gender with men representing approximately $54 \%$ of the faculty. $68 \%$ of the Tourism, Events, and Attractions department are women, while men make up about two-thirds of the Foodservice and Lodging Management ( $67 \%$ ) and Hospitality Services ( $62 \%$ ) departments. Additionally, $65 \%$ of the college faculty are

| ROSEN COLLEGE OF HOSPITALITY |
| :---: | :---: | :---: | :---: |
| MANAGEMENT - 9-MONTH SALARY AND |
| PERCENT WOMEN (2016) | white, with Asians representing an additional $17.5 \%$ of the college faculty. There are slightly more international male faculty than females. Only $6 \%$ of the RCHM faculty are underrepresented minorities.

The median salary of RCHM faculty is approximately $\$ 72,700$. The department of Hospitality Services has the highest median income ( $\$ 78,730$ ), while Foodservice \& Lodging Management has a median salary of $\$ 70,000$.


## COLLEGE OF MEDICINE (COM)

Approximately $57 \%$ of the COM faculty are men. Clinical Sciences faculty ( $75 \%$ ) have the largest proportion of women in the College of Medicine, while only $33 \%$ of Medical Education faculty and $39 \%$ of faculty in the Burnett School of Biomedical Sciences are women. COM faculty are approximately $62 \%$ white, with Asians representing an additional $20 \%$ of the faculty. COM has one of the highest proportions of underrepresented minority faculty (14\%) at UCF. Only 4\% of the faculty are considered International.

The median salary among College of Medicine faculty is approximately $\$ 112,942$. Clinical Sciences has the highest median salary ( $\$ 199,500$ ), while the median salary for faculty in the Burnett School of Biomedical Sciences $(\$ 95,032)$ is slightly lower than the overall college median.


COLLEGE OF MEDICINE - 9-MONTH
SALARY AND PERCENT WOMEN (2016)


## COLLEGE OF NURSING (CON)

The College of Nursing is the most female-dominated college at UCF with women representing approximately $85 \%$ of the faculty. CON also has the highest proportion of white faculty ( $85 \%$ )
 compared to other colleges. Approximately $13 \%$ of faculty are underrepresented minorities and only $2 \%$ of the CON faculty are Asian. There were no International faculty in CON in 2016.

All faculty in CON are housed within the same department, so limited information is available to compare median salaries. Overall, the median salary of College of Nursing faculty is approximately $\$ 73,894$. There are only four colleges with a lower median salary than CON faculty.


## COLLEGE OF OPTICS AND PHOTONICS (CREOL)

The College of Optics and Photonics is the most male-dominated college at UCF, with men representing approximately $93 \%$ of the faculty. CREOL also represents the smallest proportion of faculty by college. Approximately $71 \%$ of the faculty are white, while Asians represent the next largest proportion (18\%), and International faculty ( $7 \%$ ). Only $3 \%$ of the faculty are underrepresented minorities. There are no non-white women in the college.

The median salary of CREOL faculty is approximately $\$ 121,482$. All faculty in CREOL are housed within the same department, so limited information is available to compare median salaries. However, the College of Optics and Photonics has the third highest median salary among UCF colleges.


> COLLEGE OF OPTICS AND PHOTONICS - 9-MONTH SALARY AND PERCENT WOMEN (2016)


## COLLEGE OF SCIENCES (COS)

The College of Science has the largest number of faculty. Overall, men represent approximately two-thirds ( $66 \%$ ) of the COS faculty. The department of Anthropology (50\%), Nicholson School of Communications (47\%), and the department of Psychology (46\%) have the highest proportions of women in the College of Sciences. Additionally, almost three-quarters of the COS faculty are white ( $74 \%$ ), an additional $12 \%$ are Asian and $10 \%$ are underrepresented minorities. Only 4\% of COS faculty are considered international faculty.

The median salary among COS faculty is approximately $\$ 75,406$. The departments of Statistics $(\$ 87,145)$, Mathematics ( $\$ 85,270$ ), and Physics $(\$ 82,492)$ have the highest median salaries in COS. They also have the lowest proportions of women within the college (18-19\%). On the other hand, Anthropology ( $\$ 65,250$ ), Communications ( $\$ 63,117$ ), and Political Science $(\$ 61,684)$ have the lowest median salaries in the college. The proportion of women in these departments ranges from $27 \%$ to $50 \%$.


## INSTITUTES AND CENTERS (INSTITUTES)

Approximately $60 \%$ of the institute faculty are men. However, two-thirds of the faculty in the English Language Institute (ELI) and the Undergraduate Studies - Interdisciplinary Studies (UG-IS) departments are women (67\%). On the other hand, only $21 \%$ of faculty in either the NanoScience Technology Center (NTC), Advanced Materials Processing and Analysis Center (AMPAC), or the Florida Solar Energy Center (FSEC) are women. Approximately $40 \%$ of the Institute for Simulation and Training (IST) faculty are women.

| INSTITUTES AND CENTERS - 9- |
| :---: | :---: | :---: |
| MONTH SALARY AND PERCENT |
| WOMEN (2016) |

While this group represents a small portion of faculty at UCF, the research institutes and centers are the second most diverse group, with whites representing $61 \%$ of institute faculty. Approximately $21 \%$ of faculty are Asian, and $12 \%$ are international. However, only $5 \%$ are underrepresented minorities.

The median salary among faculty in the institutes and centers is approximately $\$ 80,000$. The median salary for ELI and UG-IS faculty is substantially lower than the overall median $(\$ 42,680)$, while IST faculty have a median salary of $\$ 105,000$.


## APPENDIX B - DATA AND ANALYSIS

## SALARY VS. LOG SALARY




Changing our dependent variable has a drastic effect on how we interpret our results. Namely, do we believe that the factors in our data have an additive effect on salary, or a multiplicative one? Based on the available literature in similar salary equity studies, we chose to make the log salary our dependent variable.

## INTERPRETING LOG SALARY MODEL RESULTS

The multivariate model for salary is relatively simple, and looks like

$$
\text { Adjusted } 9 \text { Month Salary }=\beta_{0}+\beta_{1} x_{1}+\beta_{2} x_{2}+\cdots+\beta_{p} x_{p}
$$

Where $p$ is the number of factors considered, and $x$ is the value of a particular factor. The interpretation is equally straightforward. Say that $x_{1}$ was the total number of years a faculty member has been at UCF. For an increase of one year at UCF, we can expect an increase of $\beta_{1}$ dollars to the faculty member's salary. There is more nuance to interpreting categorical variables, but the point is that each variable is assumed to have an additive effect on salary.

The multivariate model for log salary, on the other hand, takes the form

$$
\log (\text { Adjusted } 9 \text { Month Salary })=\beta_{0}+\beta_{1} x_{1}+\beta_{2} x_{2}+\cdots+\beta_{p} x_{p}
$$

When we exponentiate both sides, the equation becomes

$$
\begin{aligned}
& e^{\log (\text { Adjusted } 9 \text { Month Salary) }}=e^{\beta_{0}+\beta_{1} x_{1}+\beta_{2} x_{2}+\cdots+\beta_{p} x_{p}} \\
& \text { Adjusted } 9 \text { Month Salary }=e^{\beta_{0}+\beta_{1} x_{1}+\beta_{2} x_{2}+\cdots+\beta_{p} x_{p}} \\
& \text { Adjusted } 9 \text { Month Salary }=e^{\beta_{0}} * e^{\beta_{1} x_{1}} * e^{\beta_{2} x_{2}} * \ldots * e^{\beta_{p} x_{p}}
\end{aligned}
$$

Note that the variables in this model have a multiplicative effect on salary, which changes how results are reported. Neither method is right or wrong, necessarily, just different.

## COLLEGE / DEPARTMENT BREAKDOWN

We could add every department into models 3 and 4 , but adding so many dummy variables creates unwanted clutter that may not be necessary. Which ones to keep? Or conversely, which ones can we ignore?

We can test for differences in variance between departments within colleges using a nested ANOVA test of the form:

Unsurprisingly, they're different. But the results of that test only tell you that within at least one college, there is a significant difference between department mean salaries. It does not provide specifics as to which colleges have differences between their departments. So, we go college by college and do one-way ANOVA on the departments to look for differences in mean salaries.

If the mean salary does not differ much between departments within a college, we can just use the college and reduce the number of departments we need to add into the model.

| College | p-value |
| :--- | :--- |
| Admin | Not significant |
| College of Arts \& Humanities | $* * *$ |
| College of Business Administration | $* * *$ |
| College of Education | Not significant |
| College of Engineering/Computer Science | Not significant |
| College of Health \& Public Affairs | Not significant |
| College of Hospitality Management | $* * *$ |
| College of Medicine | N/A - Only one department |
| College of Nursing | N/A - Only one department |
| College of Optics \& Photonics | $* * *$ |
| College of Sciences | $* * *$ |
| Institutes |  |

For the colleges where the results were not significant, we can conclude that the mean salaries between departments in that college did not differ significantly. However, salary distributions are often skewed to the right, which violates the assumption of normality that the ANOVA test requires.


Shown above is the distribution of salaries for the psychology department as an example. Therefore, it is prudent to use the Kruskal-Wallis test to check differences in medians, rather than means, to see if the same results hold.

| College | p-value |
| :--- | :--- |
| Admin | Not significant |
| College of Arts \& Humanities | $* * *$ |
| College of Business Administration | $* * *$ |
| College of Education | Not significant |
| College of Engineering/Computer Science | Not significant |
| College of Health \& Public Affairs | Not significant |
| College of Hospitality Management | $* * *$ |
| College of Medicine | N/A - Only one department |
| College of Nursing | N/A - Only one department |
| College of Optics \& Photonics | $* * *$ |
| College of Sciences | $* * *$ |
| Institutes |  |

The results are nearly identical, which is good news. This means that for Admin, College of Engineering/Computer Science, College of Health \& Public Affairs, and College of Hospitality Management, we can safely use only the college in our models, without needing to break them down further to the department level.

## EMPLOYEE CLASS

Faculty members are broadly categorized into either Regular, Visiting, Clinical, or Research.

| Employee Class | Count |
| :--- | :--- |
| A\&P Regular | 1489 |
| A\&P Visiting | 61 |
| Clinical | 28 |
| Research | 28 |

Since the counts for Clinical and Research are so low, we wish to group them in some way.


We would like to group the Clinical and Research faculty together, but we should test for a difference in medians first with a Wilcoxon Rank-Sum test. We do not find a significant difference, so we can feel free to group them.

We also group Regular and Visiting Faculty together, based on their shared job description. Despite significant differences in their medians, we feel this grouping is justified given their similar attributes and the small number of visiting faculty.

## APPENDIX C - FULL MODEL TABLE

Table 5: Log-Linear regression results: The effects of Sociodemographics, Experience, Departmental Structure, and Merit in 9-month (or equivalent) Salary Differences for among UCF Faculty in 2016

| Independent Variables | Model 1 |  | Model 2 |  | Model 3 |  | Model 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female | -. 21 [-.24, -.18] | *** | -. 05 [-.07, -.02] | *** | -. 03 [-.05, , -.01] | ** | -. 04 [-.06, -.02] | *** |
| Race/Ethnicity ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| Asian | . 21 [.15, .24] | *** | . 06 [.03, , .10] | *** | . 04 [.01, .07] | * | . 05 [.02, . 07 ] | ** |
| International | -. 13 [-. $15, .00]$ | ** | . 04 [-. $02, .09]$ |  | . 02 [-.03, .06] |  | . 02 [-.02, .07] |  |
| Underrepresented Minority | -. 06 [-. $10,-.00]$ |  | -. 04 [-.08, , -.01] | ** | -. 03 [-. $06, .00]$ | * | -. 003 [-.06, .00] | * |
| Gender/Race Interactions ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |
| Asian x Female | -. 06 [-. $17, .04]$ |  | -. 06 [-. $13, .01$ ] | $\dagger$ | -. 03 [-. $09, .04]$ |  | -. 01 [-. 07, , 05] |  |
| International x Female | . 17 [.02, . 33$]$ | * | . 12 [.01, .24] | * | . 10 [-.00, .20] | $\dagger$ | . 09 [.00 , .19] | * |
| Underrep. Minority x Female | . 01 [-.09, 0.11] |  | . 003 [-.06, .07] |  | . 002 [-.06, .06] |  | . 01 [-. $04, .07]$ |  |
| Number of years at UCF |  |  | -. 002 [.00, .00] | * | -. 001 [.00, .00] |  | -. 005 [-.01, -.00] | *** |
| Number of years since degree |  |  | . 005 [.00, , 01] | *** | . 004 [.00, , 01] | *** | . 005 [.00, , .01] | *** |
| Rank ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |
| Associate Professor |  |  | -. 33 [-. 37 , -. 30 ] | *** | -. 31 [-. $34,-.28$ ] | *** | -.26[-.29, , .23] | *** |
| Assistant Professor |  |  | -. 48 [-.55, , -.41] | *** | -. 43 [-.50, , -.37] | *** | -. 36 [-.42, , -.30] | *** |
| Instructor/Lecturer |  |  | -. 90 [-. 97 , -.84] | *** | -. 71 [-.78, , -.64] | *** | -. 64 [-. $70,-.58$ ] | *** |
| Tenure Status ${ }^{\text {d }}$ |  |  |  |  |  |  |  |  |
| Tenure-Track |  |  | . 05 [-.01, .11] | $\dagger$ | -. 10 [-. $16,-.04]$ | ** | -. 09 [-. $15,-.03]$ | ** |
| Non-Tenure-Earning |  |  | -. 05 [-. $12, .03$ ] |  | -. 06 [-. $12, .01]$ | $\dagger$ | -. 03 [-.09, .03] |  |
| Number of ranks held at UCF |  |  | -. 08 [-. $10,-.05$ ] | *** | -. 06 [-.08, , -.03] | *** | -. 09 [-.11, -.07] | *** |
| College/Department ${ }^{\text {e }}$ |  |  |  |  |  |  |  |  |
| Administration |  |  |  |  | . 36 [.30, . 42 ] | *** | . 19 [.13, .26] | *** |
| CAH/English |  |  |  |  | -. 26 [-. $34,-.18]$ | *** | -. 25 [-. $32,-.17]$ | *** |
| CAH/History |  |  |  |  | -. 20 [-. $30,-.11$ ] | *** | -. 20 [-.29, -.11] | *** |
| CAH/Modern Lang \& Lit |  |  |  |  | -. 28 [-. $36,-.20]$ | *** | -. 28 [-.35, -.21] | *** |
| CAH/Other |  |  |  |  | -. 02 [-. 17 , .13] |  | -. 07 [-.21, .07] |  |
| CAH/Performing Arts |  |  |  |  | -. 30 [-. $38,-.23$ ] | *** | -. 29 [-.36, , -.22] | *** |
| CAH/Philosophy |  |  |  |  | -. 30 [-.41, -.19] | *** | -. 29 [-. 39 , -.19] | *** |
| CAH/Visual Arts and Design |  |  |  |  | -. 18 [-. $25,-.11]$ | *** | -. 16 [-.22, , -.09] | *** |
| CAH/Writing and Rhetoric |  |  |  |  | -. 29 [-. $38,-.20]$ | *** | -. 30 [-.39, -.22] | *** |
| CBA/Accounting |  |  |  |  | . 58 [.47, .69] | *** | . 59 [.49, .69] | *** |
| CBA/Economics |  |  |  |  | . 24 [.11, . 38 ] | *** | . 26 [.13, . 38 ] | *** |
| CBA/Finance \& Real Estate |  |  |  |  | . 58 [.47, . 70 ] | *** | . 57 [.46, .67] | *** |
| CBA/IB and Sports Business |  |  |  |  | . 24 [.07, . 40 ] | ** | . $22[.06, .37]$ | ** |
| CBA/Management |  |  |  |  | . 48 [.37, , .59] | *** | . 46 [.36, .56] | *** |
| CBA/Marketing |  |  |  |  | . 58 [.45, .71] | *** | . 54 [.42, .66] | *** |
| CECS/Engineering \& Com Sci. |  |  |  |  | . 11 [.07, .16] | *** | . 12 [.08, .16] | *** |
| CEDHP/Child, Family \& Comm. |  |  |  |  | -. 07 [-. $16, .02]$ |  | -. 06 [-. $15, .02]$ |  |
| CEDHP/Education \& Human Sci. |  |  |  |  | -. 08 [-. $19, .03]$ |  | -. 09 [-. 20 , .01] | $\dagger$ |
| CEDHP/Teach, Learn, \& Lead |  |  |  |  | -. 09 [-. $16,-.03]$ | ** | -. 08 [-. $14,-.02]$ | * |
| COHPA/Health \& Public Affairs |  |  |  |  | -. 02 [-. $06, .02]$ |  | -. 01 [-.05, .03] |  |
| RCHM/Hospitality Management |  |  |  |  | -. 01 [-. $08, .06]$ |  | -. 02 [-. $09, .04]$ |  |
| COM/Burnett Biomed Sciences |  |  |  |  | . 02 [-.05, . 10$]$ |  | . 04 [-. $03, .11]$ |  |
| COM/Clinical Sciences |  |  |  |  | . 56 [.36, . 76 ] | *** | . 52 [.33, .71] | *** |
| COM/Internal Medicine |  |  |  |  | . 35 [.24, . 46$]$ | *** | . 35 [.24, . 45 ] | *** |
| COM/Medical Education |  |  |  |  | . $22[.08, .36]$ | ** | . 25 [.12, . 38 ] | *** |
| CON/Nursing |  |  |  |  | . 08 [.01, . 15$]$ | * | . 12 [.05, . 19$]$ | *** |
| CREOL/Optics \& Photonics |  |  |  |  | . 10 [.00, .20] | * | . 13 [.03, .22] | ** |
| COS/Anthropology |  |  |  |  | -. 13 [-.25, -.02] | * | -. 16 [-.27, -.05] | ** |
| COS/Bio Sciences |  |  |  |  | -. 02 [-. $13, .08]$ |  | -. 04 [-. $14, .06]$ |  |
| COS/Chemistry \& Forensic Sci |  |  |  |  | . 002 [-. $09, .10]$ |  | -. 002 [-.09, .09] |  |
| COS/Communication |  |  |  |  | -. 13 [-.21, -.05] | ** | -.12[-. $19,-.04]$ | ** |
| COS/Mathematics |  |  |  |  | -. 18 [-. $25,-.10]$ | *** | . 14 [-. $21,-.07]$ | ** |
| COS/Physics |  |  |  |  | -. 07 [-. $15, .01$ ] | $\dagger$ | -. 05 [-.13, .03] |  |
| COS/Political Science |  |  |  |  | -. 17 [-.27, , -.08] | *** | -. 16 [-.24, , -.07] | *** |
| COS/Psychology |  |  |  |  | -. 03 [-. $11, .04]$ |  | -. 02 [-. 09 , .05] |  |

UCF Institutional Knowledge Management
Table 4 (cont.): Log-Linear regression results: The effects of Sociodemographics, Experience, Departmental Structure, and Merit in 9-month (or equivalent) Salary Differences for among UCF Faculty in 2016

| Independent Variables | Model 1 |  | Model 2 |  | Model 3 |  | Model 4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| College/Department ${ }^{\text {e }}$ |  |  |  |  |  |  |  |  |
| COS/Sociology |  |  |  |  | -. $12[-.23,-.02]$ | * | -. 09 [-. $19, .01]$ | $\dagger$ |
| COS/Statistics |  |  |  |  | -. 07 [-. $20, .06]$ |  | -. 06 [-. $18, .07]$ |  |
| INST/English Lang or Interdisc. |  |  |  |  | -. 27 [-. $39,-.14]$ | *** | -. 23 [-. $35,-.11$ ] | ** |
| INST/Inst. Simulation \& Training |  |  |  |  | . 12 [-.03, .27] |  | . 17 [.03, .31] | * |
| INST/NTC, AMPAC, or FSEC |  |  |  |  | -. 04 [-. 14 , .07] |  | . 01 [-.11, .09] |  |
| Clinical or Research Faculty ${ }^{\dagger}$ |  |  |  |  | . 13 [.06, .19] | *** | . 15 [.09, .22] | *** |
| Currently Serving Admin Role |  |  |  |  |  |  | . 23 [.20, .26] | *** |
| Number of TIP and RIA awards |  |  |  |  |  |  | . 09 [.08, . 10$]$ | *** |
| Number of times using paid leave |  |  |  |  |  |  | . 02 [.01, . 04 ] | ** |
| N |  |  |  |  |  |  |  |  |
| Constant | $\begin{gathered} 11.41 \\ {[11.39,11.44]} \end{gathered}$ | ** | $\begin{gathered} 11.85 \\ {[11.79,11.91]} \end{gathered}$ | ** | $\begin{gathered} 11.80[11.74, \\ 11.85] \end{gathered}$ | *** | $\begin{gathered} 11.73[11.68, \\ 11.78] \end{gathered}$ | * |
| Model (F) | 42.45 | * | 334.20 | * |  |  |  |  |
| Adjusted R ${ }^{2}$ | . 083 |  | . 559 |  | . 661 |  | 0.701 |  |

Note: Entries are given as log estimate with $95 \%$ Confidence Interval in brackets [lower limit, upper limit] $\dagger p<.01$ * $p<.05^{* *} p<.01$. *** $p<.001$
${ }^{\text {a }}$ Whites as reference group ${ }^{b}$ White males as reference group ${ }^{\text {c }}$ Full Professor as reference group ${ }^{d}$ Tenured faculty as reference group
${ }^{e}$ The reference level for College/Department was obtained by making a copy of the data, assigning "UCF" as the College/Department for that copy, and setting "UCF" to the reference level. Therefore, the college/department is being compared to the university as a whole. Duplicating the data has no practical effect on the model. Additionally, colleges with no significant difference between departments within the college are not sorted by college and department. For these college, t College/Department label represents all departments within.
${ }^{f}$ Employee class of Regular or Visiting faculty as reference group.

From: "Teng, Michael N." [mteng@health.usf.edu](mailto:mteng@health.usf.edu)
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Cc: "Thompson, Amy" [athompson@usf.edu](mailto:athompson@usf.edu)
Subject: Florida Senate Bill 104 (Computer Coding)

## Dear Colleagues,

I am e-mailing you, the Faculty Senate Presidents/Chairs of the SUS for AY16/17, about an issue that has recently arisen at one of our Faculty Senate meetings. Senate Bill 104 would allow high school students to substitute 2 credits of computer coding for foreign language class requirements beginning AY19/20. While this proposed legislation is targeted to $\mathrm{K}-12$ education, it will also have effects on Florida colleges and universities. Amy Thompson from our Department or World Languages has put together a brief summary of the bill and its potential impacts (attached).

I would like to ask you all if there has been a similar discussion at your Faculty Senate meetings. We are considering putting forth a Senate resolution opposing this bill and thought it would have more impact if we had a joint resolution with our sister SUS institutions. Alternatively, putting forward similar resolutions from the different Faculty Senates at the same time, during the legislative session, would likely achieve the same result.

If any of your Faculty Senates would like to co-sponsor a joint resolution, I propose that we have a committee with a representative from each institution to draft the resolution, which can then be put forward.

Please let me know if this is of interest (or not) to your Senators. I apologize if I have sent this message to a past President and would appreciate it if you could forward the e-mail to the correct party.

Best regards, MT

Michael Teng, Ph.D.
Associate Professor
President, USF Faculty Senate
Division of Allergy \& Immunology, Department of Internal Medicine
University of South Florida Morsani College of Medicine

## Information on the Computer Coding bill: SB 104

Bill summary: Started in the 2019-2020 AY, high school students would be able to substitute computer coding classes for foreign language classes ( 2 credits).

## Negative impacts for Florida State Institutions:

1. College system institutions and state universities would be required to accept these credits as foreign language credits (even though parents and students would have to sign a statement saying that they are aware that these coding credits may not meet out-of-state foreign language requirements).
2. Students could take these courses at the Florida Virtual School if their high schools don't offer courses, and state universities would likewise be required to accept these credits.
3. The Florida department of education would be responsible for the oversight of the courses that would count for credit. It's not clear from the way the bill is written if universities would have any input in these decisions.
4. According to the 2011 census data Florida is the state with the $4^{\text {th }}$ largest population of individuals who speak a language other than English at home (roughly 5 million people). Taking away the foreign language requirement could result in less understanding of people with different cultural backgrounds. Some succinct, easily accessible information is found in articles in "The Conversation" by USF faculty members regarding the benefits of foreign language study https://theconversation.com/how-learning-a-new-language-improves-tolerance-68472, as well as why automatic translations are likely not viable in the foreseeable future:
https://theconversation.com/could-the-language-barrier-actually-fall-within-the-next-10-years54805
5. Each university likely has more specific policies and initiatives that would be negatively impacted by the reduction of foreign language study. USF, for example, has initiated a "Global Citizen's Project," part of which includes language study and study abroad. Similarly, USF is in the process of applying for membership into Phi Beta Kappa, which requires no less than an intermediate level of a foreign language for all potential inductees. In both cases, USF students would be behind the curve if no foreign language study was required at the high school level.

In sum: Although computer coding and technological literacy is of upmost importance, these courses should not substitute for foreign language study. Both skills are crucial in our increasingly globalized society, and students should not be required to choose one at the expense of the other.

## Resolution 2016-2017-17 Faculty Senate Bylaw Change, Restore Section IV.I. Resolutions

Whereas, when the Faculty Constitution was separated into two separate documents, Faculty Constitution and Bylaws, language regarding the process of adopting Senate resolutions was inadvertently left out of the Bylaws; and

Whereas, currently the language regarding the process of adopting Senate resolutions is contained in the Faculty Handbook; therefore

BE IT RESOLVED that the Bylaws of the Faculty Senate Constitution be amended as follows to restore the Resolution language by inserting a new I. Resolutions, under Section IV. Meetings of the Senate:
I. Resolutions

As the elected body of the general faculty, the Faculty Senate may formulate its opinion upon any subject of interest to the university and adopt appropriate resolutions. Resolutions addressing those areas of authority legally reserved to the president and Board of Trustees are advisory. Each resolution adopted by the Faculty Senate is forwarded to the provost and executive vice president who shall act upon the recommendation within 60 days. The provost and executive vice president shall have veto power over any resolution by the Senate. The veto with rationale shall be communicated in writing to the Faculty Senate and the chair of the Faculty Senate. The Senate, by a two-thirds majority vote, may appeal to the president any resolution vetoed. A decision by the president is final.

## Resolution 2016-2017-18 Abbreviated Cumulative Progress Evaluation (CPE) Requirement for Promotion to Full Professor

Whereas, the Cumulative Progress Evaluation (CPE) process is mandatory for Assistant Professors and Associate Professors on the tenure-track who have not yet been granted tenure; and

Whereas, the COACHE survey of faculty (satisfaction) in 2015 demonstrated UCF's strength in clarity on the requirements for tenure and promotion to Associate Professor, which may have resulted from the CPE process; and

Whereas, the COACHE survey of faculty (satisfaction) in 2015 also indicated that faculty promotion to Full Professor was an area of concern for the University; and

Whereas, the current collective bargaining agreement allows any faculty at the Associate Professor level to be evaluated for progress towards promotion to full professor via a CPE process; and

Whereas, only those faculty who seek promotion to full Professor would be impacted by a one-time requirement for an abbreviated CPE prior to submission for promotion; and

Whereas, the abbreviated CPE for Associate Professors would consist of an up-to-date Curriculum vitae and a one page summary statement of impact, parallel to a pilot program developed in the College of Science; and

Whereas, the abbreviated CPE for Associate Professors would allow for valuable feedback on a candidates potential for promotion when stakes are low, and would be ideal to occur 2-3 years prior to application for Full professor; and

Whereas, the abbreviated CPE for Associate Professors could be done regularly (based on the faculty members prerogative), providing valuable guidance to the faculty member on his/her progress towards promotion; therefore

Be it resolved that faculty at the Associate Professor level will be required to be reviewed for their progress for promotion to Full Professor (abbreviated CPE for Associate Professors) at least one time prior to their application for promotion to Full Professor.


[^0]:    Examining possible differences by gender and ethnicity, while accounting for factors that affect salary.

