

2018-2019 Faculty Salary Compression Study

Executive Summary

In response to [Faculty Senate Resolution #18-26](#) (approved on March 27, 2018), a faculty salary compression study was conducted between Fall 2018 and Fall 2019. Two advisory groups (representing the Divisions of Academic Affairs and Health Sciences) provided input throughout the study and approved the final report. The analyses, conducted by the Office of Institutional Planning, Assessment and Research (IPAR), included 1,399 permanent full-time faculty (as of Oct. 31, 2018). Any changes to faculty salary (including equity adjustments) since Oct. 31, 2018 are not reflected in this study.

The study was intentionally designed to be an internal analysis with the goal of identifying individuals whose salaries were lower than similarly situated colleagues within ECU after taking into account rank, experience and other appropriate predictors of salaries. After a review of literature and methodologies utilized in ECU's 2014 Faculty Salary Equity Study, the advisory groups approved the use of multiple regression analyses to determine whether there were signs of systematic compression or inversion at ECU and to identify low-end salary outliers. For this study, signs of a systematic salary compression or inversion were defined as the following after controlling for other predictors of salary in the regression modeling: 1) the estimated salary difference between assistant and associate professors is <\$4,000; 2) the estimated salary difference between associate and full professors is <\$6,000; 3) time in rank is negatively associated with salary and the association is statistically significant; and 4) time in rank is positively associated with salary, but it is not statistically significant.

Regression modeling was conducted for seven subgroups of faculty. Due to small population size, the regression models for Joyner and Laupus Libraries, College of Allied Health Sciences (CAHS), College of Nursing (CON), School of Dental Medicine (SoDM), and Basic Science and Other Non-clinical Faculty at Brody should be interpreted with caution. Based on the compression/inversion signs established above, the study did not find signs of a systematic salary compression/inversion issue in Academic Affairs, Libraries, CAHS and SoDM. For CON, Brody Clinical Faculty, and Brody Basic Science and Non-clinical Faculty, the estimates for time in rank in the regression models suggested possible salary compression.

The regression models were used to calculate predicted salaries, residuals (i.e., difference between actual and predicted salaries), and standardized residuals. The advisory groups defined "low-end outliers" as individuals whose actual salaries in Fall 2018 were at least 0.75 standard deviation below predicted salary. A total of 230 individuals were identified for further salary reviews based on the threshold. A predicted salary, residual, standardized residual, and salary benchmark (as described below) for each faculty member in the regression analyses were included in Unit Faculty Salary Reports prepared for the Provost, the Vice Chancellor for Health Sciences, Deans, and Directors of the Libraries.

The regression analyses provided a unified approach to examining variance in faculty salaries. However, regression analysis is subject to several limitations and should not be the only tool used by unit administrators to identify and address salary compression, inversion, and other equity issues. Unit administrators should consider faculty productivity, performance reviews, and other local context

pertaining to faculty salaries when interpreting the results from the study and taking actions to address salary issues.

To address other faculty concerns, the advisory groups further requested IPAR to conduct two analyses to provide additional information to the campus: 1) salary benchmark analyses to compare ECU faculty's salaries with their peers nationally; and 2) analyses of the impact of hire/promotion year on faculty salaries. The results of the analyses are presented in Appendices Two and Three.

Individuals can provide comments or ask questions about the study by completing an online feedback form by March 1, 2020 at https://ecu.az1.qualtrics.com/jfe/form/SV_0wRZXavC2r0nkgZ. The Faculty Welfare Committee will review all feedback, taking appropriate action when possible and forwarding questions and issues more appropriately addressed by others. The responses are confidential unless a respondent chooses to leave the contact information at the end of the feedback form. Open forums will be hosted by university and Faculty Senate leadership to discuss results and communicate follow-up actions.