## Case Western Reserve University Salary Equity Study Academic Year 2007-2008

## The Data

Data, received June, 2008, are the courtesy of the Office of the Provost provided by Jean Gubbins, Institutional Research.

Subjects are all full time active faculty from all university departments with the exception of the clinical departments of the School of Medicine.

Salaries are adjusted to a 9 month equivalent appointment.

Data are for the year 2007 to 2008. Funding for the NSF ACES Grant began September, 2003.

## College Arts and Sciences: Humanities Departments

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | Female | 8 | $\$ 84,039$ |
| Professor | Male | 21 | $\$ 89,737$ |
| Associate Professor | Female | 20 | $\$ 64,683$ |
| Associate Professor | Male | 18 | $\$ 65,123$ |
| Assistant Professor | Female | 9 | $\$ 54,563$ |
| Assistant Professor | Male | 7 | $\$ 55,982$ |
| Total |  | 83 |  |

## College Arts and Sciences: Humanities Departments

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## College Arts and Sciences: Humanities Departments

| Rank | Race | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | White | 28 | $\$ 88,773$ |
| Professor | Asian | 1 | $\cdot$ |
| Associate Professor | White | 31 | $\$ 64,051$ |
| Associate Professor | African American | 2 | . |
| Associate Professor | Asian | 4 | $\$ 60,645$ |
| Associate Professor | Hispanic | 1 | $\cdot$ |
| Assistant Professor | White | 14 | $\$ 55,127$ |
| Assistant Professor | Hispanic | 2 | . |
| Total |  | 83 |  |

## College Arts and Sciences: Humanities Departments

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree, and Years since Highest Degree.

Residual $=$ Actual Salary adjusted to 9 months - Predicted Salary


Control for Rank \& Tenure (RTIN) vs. Not (RTOUT)

## College Arts and Sciences: Sciences Departments

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | ---: | ---: |
| Professor | Female | 13 | $\$ 96,192$ |
| Professor | Male | 57 | $\$ 101,567$ |
| Associate Professor | Female | 11 | $\$ 71,403$ |
| Associate Professor | Male | 14 | $\$ 72,977$ |
| Assistant Professor | Female | 16 | $\$ 59,646$ |
| Assistant Professor | Male | 15 | $\$ 60,046$ |
| Total |  | 126 |  |

## College Arts and Sciences: Sciences Departments

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## College Arts and Sciences: Sciences Departments

| Rank | Race | N | Mean <br> Salary |
| :--- | :--- | :---: | :---: |
| Professor | White | 66 | $\$ 101,359$ |
| Professor | African American | 1 | $\cdot$ |
| Professor | Asian | 2 | $\cdot$ |
| Professor | Unknown | 1 | $\cdot$ |
| Associate Professor | White | 19 | $\$ 70,696$ |
| Associate Professor | African American | 3 | $\$ 81,626$ |
| Associate Professor | Asian | 3 | $\$ 73,006$ |
| Assistant Professor | White | 26 | $\$ 58,514$ |
| Assistant Professor | Asian | 4 | $\$ 67,665$ |
| Assistant Professor | Hispanic | 1 | $\cdot$ |
| Total |  | 126 |  |

## College Arts and Sciences: Sciences Departments

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree, and Years since Highest Degree.
Residual $=$ Actual Salary adjusted to 9 months - Predicted Salary


## Case School of Engineering

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | :---: | :---: |
| Professor | Female | 4 | $\$ 121,916$ |
| Professor | Male | 57 | $\$ 120,396$ |
| Associate Professor | Female | 2 | . |
| Associate Professor | Male | 23 | $\$ 85,618$ |
| Assistant Professor | Female | 6 | $\$ 79,699$ |
| Assistant Professor | Male | 17 | $\$ 81,312$ |
| Total |  | 109 |  |

## Case School of Engineering

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## Case School of Engineering

| Rank | Race | N |  |
| :--- | :--- | ---: | :---: |
| Professor | White | 48 | $\$ 123,818$ |
| Professor | African American | 1 | $\cdot$ |
| Professor | Asian | 11 | $\$ 108,554$ |
| Professor | Native American | 1 | $\cdot$ |
| Associate Professor | White | 19 | $\$ 85,186$ |
| Associate Professor | Asian | 5 | $\$ 83,167$ |
| Associate Professor | Hispanic | 1 | $\cdot$ |
| Assistant Professor | White | 11 | $\$ 79,963$ |
| Assistant Professor | African American | 1 | $\cdot$ |
| Assistant Professor | Asian | 9 | $\$ 83,366$ |
| Assistant Professor | Hispanic | 1 | $\cdot$ |
| Assistant Professor | Unknown | 1 | $\cdot$ |
| Total |  | 109 |  |

## Case School of Engineering

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


Control for Rank and Tenure (RTIN) vs. Not (RTOUT)

## Frances Payne Bolton School of Nursing

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | Female | 11 | $\$ 110,501$ |
| Associate Professor | Female | 13 | $\$ 77,096$ |
| Associate Professor | Male | 1 | . |
| Assistant Professor | Female | 24 | $\$ 61,613$ |
| Assistant Professor | Male | 1 | . |

Total

## Frances Payne Bolton School of Nursing

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


Control for Rank and Tenure (RTIN) vs. Not (RTOUT)

## Frances Payne Bolton School of Nursing

| Rank | Race | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | White | 10 | $\$ 110,157$ |
| Professor | African American | 1 | . |
| Associate Professor | White | 13 | $\$ 77,312$ |
| Associate Professor | African American | 1 | . |
| Assistant Professor | White | 21 | $\$ 61,851$ |
| Assistant Professor | African American | 2 | . |
| Assistant Professor | Asian | 1 | . |
| Assistant Professor | Hispanic | 1 | . |
| Total |  | 50 |  |

## Frances Payne Bolton School of Nursing

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## Mandel School of Applied Social Sciences

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | :--- | :---: |
| Professor | Female | 3 | $\$ 116,560$ |
| Professor | Male | 7 | $\$ 128,466$ |
| Associate Professor | Female | 4 | $\$ 90,452$ |
| Associate Professor | Male | 3 | $\$ 71,577$ |
| Assistant Professor | Female | 3 | $\$ 55,483$ |
| Assistant Professor | Male | 2 | . |
| Total |  | 22 |  |

## Mandel School of Applied Social Sciences

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## Mandel School of Applied Social Sciences

| Rank | Race | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | White | 10 | $\$ 124,894$ |
| Associate Professor | White | 5 | $\$ 80,831$ |
| Associate Professor | African American | 2 | . |
| Assistant Professor | White | 4 | $\$ 57,531$ |
| Assistant Professor | African American | 1 | . |
| Total |  | 22 |  |

## Mandel School of Applied Social Sciences

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## School of Dental Medicine

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | :---: | :---: |
| Professor | Female | 1 |  |
| Professor | Male | 8 | $\$ 103,571$ |
| Associate Professor | Female | 5 | $\$ 80,304$ |
| Associate Professor | Male | 17 | $\$ 68,242$ |
| Assistant Professor | Female | 8 | $\$ 55,757$ |
| Assistant Professor | Male | 17 | $\$ 55,946$ |

Total
56

## School of Dental Medicine

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## School of Dental Medicine

|  |  | Mean |  |
| :--- | :--- | ---: | :---: |
| Rank | Race | N | Salary |
| Professor | White | 9 | $\$ 100,483$ |
| Associate Professor | White | 15 | $\$ 68,232$ |
| Associate Professor | African American | 2 | . |
| Associate Professor | Asian | 4 | $\$ 83,191$ |
| Associate Professor | Hispanic | 1 | . |
| Assistant Professor | White | 17 | $\$ 55,398$ |
| Assistant Professor | African American | 2 | $\cdot$ |
| Assistant Professor | Asian | 5 | $\$ 54,656$ |
| Assistant Professor | Hispanic | 1 | . |
|  |  |  |  |
| Total |  | 56 |  |

## School of Dental Medicine

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## School of Law

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | Female | 9 | $\$ 126,119$ |
| Professor | Male | 24 | $\$ 165,302$ |
| Associate Professor | Female | 4 | $\$ 86,844$ |
| Associate Professor | Male | 7 | $\$ 88,840$ |
| Assistant Professor | Female | 5 | $\$ 84,080$ |
| Assistant Professor | Male | 1 | . |
| Total |  | 50 |  |

## School of Law

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## School of Law

|  | Race | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
|  |  |  |  |
| Professor | White | 30 | $\$ 155,084$ |
| Professor | African American | 2 | $\cdot$ |
| Professor | Asian | 1 | $\cdot$ |
| Associate Professor | White | 10 | $\$ 84,425$ |
| Associate Professor | African American | 1 | $\cdot$ |
| Assistant Professor | White | 6 | $\$ 81,733$ |
|  |  | 106 |  |
| Total |  |  |  |

## School of Law

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual $=$ Actual Salary adjusted to 9 months - Predicted Salary


## School of Medicine Basic Sciences

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | :---: | ---: |
| Professor | Female | 12 | $\$ 99,510$ |
| Professor | Male | 57 | $\$ 129,057$ |
| Associate Professor | Female | 19 | $\$ 78,184$ |
| Associate Professor | Male | 43 | $\$ 75,628$ |
| Assistant Professor | Female | 29 | $\$ 61,414$ |
| Assistant Professor | Male | 49 | $\$ 61,430$ |
| Total |  | 209 |  |

## School of Medicine Basic Sciences

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree and Years since Highest Degree.
Residual $=$ Actual Salary adjusted to 9 months - Predicted Salary


## School of Medicine Basic Sciences

|  |  |  | Mean <br> Rank |
| :--- | :--- | ---: | :---: |
| Race | N | 65 | $\$ 124,944$ |
| Professor | White | 2 | $\cdot$ |
| Professor | Asian | 2 | $\cdot$ |
| Professor | Hispanic | 51 | $\$ 75,755$ |
| Associate Professor | White | 1 | $\cdot$ |
| Associate Professor | African American | 10 | $\$ 73,983$ |
| Associate Professor | Asian | 55 | $\$ 63,120$ |
| Assistant Professor | White | 22 | $\$ 57,249$ |
| Assistant Professor | Asian | 1 | $\cdot$ |
| Assistant Professor | Native American | 209 |  |

## School of Medicine Basic Sciences

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, Highest Degree and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## Weatherhead School of Management

| Rank | Gender | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | Female | 1 | . |
| Professor | Male | 24 | $\$ 159,596$ |
| Associate Professor | Female | 6 | $\$ 111,541$ |
| Associate Professor | Male | 14 | $\$ 123,429$ |
| Assistant Professor | Female | 6 | $\$ 121,381$ |
| Assistant Professor | Male | 8 | $\$ 110,899$ |

Total 59

## Weatherhead School of Management

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## Weatherhead School of Management

| Rank | Race | N | Mean <br> Salary |
| :--- | :--- | ---: | :---: |
| Professor | White | 23 | $\$ 157,184$ |
| Professor | Asian | 2 | . |
| Associate Professor | White | 14 | $\$ 110,453$ |
| Associate Professor | Asian | 6 | $\$ 141,819$ |
| Assistant Professor | White | 13 | $\$ 112,921$ |
| Assistant Professor | Hispanic | 1 | . |

## Weatherhead School of Management

Regression controlling for Rank, Tenure Status, Age, Years since Hire, Years in Rank, and Years since Highest Degree.
Residual = Actual Salary adjusted to 9 months - Predicted Salary


## Conclusions

- Differences in salary between male and female faculty cannot be explained fully by differences in Rank, Discipline, Tenure Status, Years since Hire, Years in Rank, Age, Highest Degree, and Years since attaining the Highest Degree.
- Female faculty are predominantly in lower ranks while male faculty are in higher ranks.
- The differential in tenure and rank status contribute further to disparities in salary.
- African American, Hispanic, and Native Americans faculty are underrepresented in most schools and ranks


## Conclusions

- Disparities in Schools involved within the ACES programs appear to be smaller than Schools not involved with ACES. This is particularly true of the College of Arts and Sciences Sciences and Case School of Engineering.


## Recommendations

- Continue the process of maintaining salary data.
- Perform a study of rank and retention to understand the relationship between equity and gender.
- Strongly recommend that data necessary for salary equity studies be maintained and archived for each academic year on a permanent and ongoing basis.
- Strongly recommend that an equity analysis be undertaken annually independently of University administration.
- Continue interventions to bring equity in rank and salary by gender and race where ever necessary.

