# Economic Status of Women Faculty at Pitt: 2021-22 

## Amanda Brodish, PhD

Associate Vice Provost for Data Analytics abrodish@pitt.edu

# Economic Status of Women Faculty 

-Conducted by the Office of Provost for over 20 years, every 3-5 years
-Presented to various groups on campus
-Unit-specific results discussed with deans/regional campus presidents

## Analytic Approach

## 1. Benchmarking

- Pittsburgh campus compared to the public Association of American Universities (AAU)
- Percentage of women faculty by rank
- Ratio of average woman's salary to average man's salary by rank


## Analytic Approach

## 2. Internal Analysis

- \% of women faculty by rank and tenure status
-Ratio of the average woman's salary to the average man's salary by rank, controlling for tenure-status, school, and department
- \% of various leadership roles held by women


## Benchmarking against AAU Publics <br> Data Source \& Years

- Annual Report on the Economic Status of the Profession from the American Association of University Professors (AAUP)
-98-99, 05-06, 10-11, 15-16, 18-19, 21-22
AAU Publics include, e.g.,
- Penn State, Michigan, Virginia, UC schools


# AAUP Faculty Salary Report 

-Full-time faculty (AS and T/TS) with any instructional responsibilities included, except

- Part-time faculty
- Non-instructional faculty
- Administrators
- Graduate student instructors
- All medical school faculty
- Inclusion criteria have changed over time


## Benchmarking

## Percentage of women faculty by rank

- Bar charts of \% of women by rank
- Box-and-whisker plots of \% of women overtime by rank


## \% of Women - All Faculty

The Percent of All Faculty Who are Women


The Percent of All Faculty Who are Women Over-Time


## \% of Women - Full Professors

The Percent of Full Professors Who are Women
2021-2022


The Percent of Full Professors Who are Women Over-Time


## \% of Women - Associate Professors



The Percent of Associate Professors Who are Women

2021-22
.

## \% of Women - Assistant Professors




## \% of Women - Lecturers \& Instructors



## Benchmarking

## Ratio of average woman's salary to average man's salary by rank

- Bar charts of salary ratio by rank
- Box-and-whisker plots of salary ratio overtime by rank


## Salary Ratio - All Faculty

Salary Ratio: All Faculty

2021-22


Salary Ratio Over-Time:
All Faculty

## Salary Ratio - Full Professors

Salary Ratio: Full Professor
2021-22


Salary Ratio Over-Time:
Full Professor


University of
Pittsburgh

## Salary Ratio - Associate Professors

Salary Ratio: Associate
Professor
2021-22


Salary Ratio Over-Time:
Associate Professor

## Salary Ratio - Assistant Professors

Salary Ratio: Assistant
Professor
2021-22
Salary Ratio Over-Time:
Assistant Professor


## Salary Ratio - Lecturers \& Instructors



## Internal Pitt Data

## Data Source \& Years

- University Data Warehouse
- All full-time faculty on all campuses (not just those included in the AAUP report)
$\cdot 05-06,10-11,15-16,18-19,21-22$


## Analytic Approach

## 2. Internal Analysis

- \% of women faculty by rank and tenure status
-Ratio of the average woman's salary to the average man's salary by rank, controlling for tenure-status, school, and department
- \% of various leadership roles held by women


## Analytic Approach

## 2. Internal Analysis

-\% of women faculty by rank and tenure status

- Ratio of the average woman's salary to the average man's salary by rank, controlling for tenure-status, school, and department
- \% of various leadership roles held by women


## Women as a Percent of Faculty Pittsburgh Campus, 2021-2021

|  | All | T/TS | AS |
| :--- | :---: | :---: | :---: |
| All | $45 \%$ | $34 \%$ | $51 \%$ |
| Full | $27 \%$ | $26 \%$ | $30 \%$ |
| Assoc | $45 \%$ | $41 \%$ | $48 \%$ |
| Asst | $52 \%$ | $43 \%$ | $54 \%$ |
| I \& L | $60 \%$ | n/a | $60 \%$ |

## Women as a Percent of Faculty 2-Year Comparison, Pittsburgh Campus

|  | 2018-19 | 2021-22 |
| :--- | :---: | :---: |
| All | $43 \%$ | $45 \%$ |
| Full | $26 \%$ | $27 \%$ |
| Assoc | $41 \%$ | $45 \%$ |
| Asst | $49 \%$ | $52 \%$ |
| I \& L | $57 \%$ | $60 \%$ |

## Women as a Percent of Faculty Regional Campuses, 2021-2022

|  | All | T/TS | AS |
| :--- | :---: | :---: | :---: |
| All | $47 \%$ | $40 \%$ | $54 \%$ |
| Full | $27 \%$ | $28 \%$ | $\mathrm{n} / \mathrm{a}$ |
| Assoc | $44 \%$ | $43 \%$ | $56 \%$ |
| Asst | $46 \%$ | $43 \%$ | $47 \%$ |
| I \& L | $62 \%$ | $100 \%$ | $62 \%$ |

## Women as a Percent of Faculty 2-Year Comparison, Regional Campuses

|  | 2018-19 | 2021-22 |
| :--- | :---: | :---: |
| All | $48 \%$ | $47 \%$ |
| Full | $24 \%$ | $27 \%$ |
| Assoc | $40 \%$ | $44 \%$ |
| Asst | $51 \%$ | $46 \%$ |
| I \& L | $68 \%$ | $62 \%$ |

## Analytic Approach

## 2. Internal Analysis

- \% of women faculty by rank and tenure status
- Ratio of the average woman's salary to the average man's salary by rank, controlling for tenure-status, school, and department
- \% of various leadership roles held by women


# Ratio of Women's to Men's Salary Pittsburgh Campus, 5-Year Comparison Salary Ratio with No Controls 

|  | 2005-06 | 2010-11 | 2015-16 | 2018-19 | 2021-22 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| All | $75 \%$ | $75 \%$ | $80 \%$ | $81 \%$ | $81 \%$ |
| Full | $88 \%$ | $89 \%$ | $91 \%$ | $93 \%$ | $94 \%$ |
| Assoc | $92 \%$ | $94 \%$ | $97 \%$ | $99 \%$ | $97 \%$ |
| Asst | $88 \%$ | $90 \%$ | $94 \%$ | $95 \%$ | $94 \%$ |
| I \& L | $96 \%$ | $96 \%$ | $94 \%$ | $95 \%$ | $96 \%$ |

## Ratio of Women's to Men's Salary Pittsburgh Campus T/TS Only 2021-2022

|  | All | T/TS <br> Only | School <br> Control | Dept <br> Control |
| :--- | :---: | :---: | :---: | :---: |
| All | $81 \%$ | $88 \%$ | -- | -- |
| Full | $94 \%$ | $93 \%$ | $94 \%$ | $95 \%$ |
| Assoc | $97 \%$ | $97 \%$ | $99 \%$ | $102 \%$ |
| Asst | $94 \%$ | $98 \%$ | $100 \%$ | $105 \%$ |
| I \& L | $96 \%$ | n/a | -- | -- |

# Five-Year Comparison Pittsburgh Campus T/TS Salary Ratio with Department Controls 

|  | 2005-06 | 2010-11 | 2015-16 | 2018-19 | 2021-22 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Full | $92 \%$ | $96 \%$ | $97 \%$ | $97 \%$ | $95 \%$ |
| Assoc | $97 \%$ | $99 \%$ | $100 \%$ | $106 \%$ | $102 \%$ |
| Asst | $94 \%$ | $98 \%$ | $98 \%$ | $102 \%$ | $105 \%$ |
| I \& L | n/a | n/a | n/a | n/a | n/a |

## Ratio of Women's to Men's Salary Pittsburgh Campus AS Only 2021-2022

|  | All | AS <br> Only | School <br> Control | Dept <br> Control |
| :--- | :---: | :---: | :---: | :---: |
| All | $81 \%$ | $96 \%$ | -- | -- |
| Full | $94 \%$ | $106 \%$ | $98 \%$ | $93 \%$ |
| Assoc | $97 \%$ | $105 \%$ | $100 \%$ | $110 \%$ |
| Asst | $94 \%$ | $98 \%$ | $99 \%$ | $97 \%$ |
| I \& L | $96 \%$ | $96 \%$ | $97 \%$ | $100 \%$ |

# Four-Year Comparison Pittsburgh Campus AS Salary Ratio with Department Controls 

|  | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 8 - 1 9}$ | 2021-22 |
| :--- | :---: | :---: | :---: | :---: |
| Full | $95 \%$ | $103 \%$ | $93 \%$ | $93 \%$ |
| Assoc | $99 \%$ | $97 \%$ | $104 \%$ | $110 \%$ |
| Asst | $92 \%$ | $100 \%$ | $98 \%$ | $97 \%$ |
| I \& L | $100 \%$ | $97 \%$ | $97 \%$ | $100 \%$ |

# Ratio of Women's to Men's Salary Regional Campuses, 4-Year Comparison Salary Ratio with No Controls 

|  | 2010-11 | 2015-16 | 2018-19 | 2021-22 |
| :--- | :---: | :---: | :---: | :---: |
| All | $91 \%$ | $88 \%$ | $88 \%$ | $91 \%$ |
| Full | $103 \%$ | $93 \%$ | $99 \%$ | $92 \%$ |
| Assoc | $100 \%$ | $95 \%$ | $96 \%$ | $99 \%$ |
| Asst | $97 \%$ | $95 \%$ | $95 \%$ | $98 \%$ |
| I \& L | $89 \%$ | $96 \%$ | $97 \%$ | $88 \%$ |

## Ratio of Women's to Men's Salary Regional Campuses T/TS Only 2021-22

|  | All | T/TS <br> Only | Division <br> Control |
| :--- | :---: | :---: | :---: |
| All | $91 \%$ | $94 \%$ | -- |
| Full | $92 \%$ | $91 \%$ | $91 \%$ |
| Assoc | $99 \%$ | $99 \%$ | $99 \%$ |
| Asst | $98 \%$ | $96 \%$ | $97 \%$ |
| I \& L | $88 \%$ | n/a | n/a |

# Four-Year Comparison Regional Campuses T/TS Salary Ratio with Division Controls 

|  | 2010-11 | 2015-16 | 2018-19 | 2021-22 |
| :--- | :---: | :---: | :---: | :---: |
| Full | $118 \%$ | $100 \%$ | $97 \%$ | $91 \%$ |
| Assoc | $101 \%$ | $99 \%$ | $98 \%$ | $99 \%$ |
| Asst | $98 \%$ | $106 \%$ | $102 \%$ | $97 \%$ |
| I \& L | n/a | n/a | n/a | n/a |

## Ratio of Women's to Men's Salary Regional Campuses AS Only 2021-2022

|  | All | AS Only | Division <br> Control |
| :--- | :---: | :---: | :---: |
| All | $91 \%$ | $93 \%$ | -- |
| Full | $92 \%$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| Assoc | $99 \%$ | $97 \%$ | $94 \%$ |
| Asst | $98 \%$ | $98 \%$ | $105 \%$ |
| I \& L | $88 \%$ | $87 \%$ | $85 \%$ |

## Four-Year Comparison Regional Campuses AS Salary Ratio with Division Controls

|  | 2010-11 | 2015-16 | 2018-19 | 2021-22 |
| :--- | :---: | :---: | :---: | :---: |
| Full | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| Assoc | $129 \%$ | $101 \%$ | $94 \%$ | $94 \%$ |
| Asst | $98 \%$ | $99 \%$ | $95 \%$ | $105 \%$ |
| I \& L | $87 \%$ | $90 \%$ | $94 \%$ | $85 \%$ |

## Analytic Approach

## 2. Internal Analysis

- \% of women faculty by rank and tenure status
- Ratio of the average woman's salary to the average man's salary by rank, controlling for tenure-status, school, and department
- \% of various leadership roles held by women


# \% of Women in Leadership Positions 

|  | 1996 | 2003 | 2012 | 2017 | 2019 | 2022 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Board of Trustees <br> (voting members) | $15 \%$ | $11 \%$ | $19 \%$ | $19 \%$ | $20 \%$ | $34 \%$ |
| Senior Administrators | $20 \%$ | $28 \%$ | $25 \%$ | $34 \%$ | $42 \%$ | $40 \%$ |
| Provost Senior Staff | $33 \%$ | $29 \%$ | $50 \%$ | $35 \%$ | $50 \%$ | $45 \%$ |
| Deans/Campus <br> Presidents | $13 \%$ | $25 \%$ | $13 \%$ | $20 \%$ | $44 \%$ | $56 \%$ |

# \% of Women Department/ Division Chairs 

|  | 1996 | 2003 | 2012 | 2017 | 2019 | 2022 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dietrich School | $16 \%$ | $0 \%$ | $26 \%$ | $39 \%$ | $20 \%$ | $43 \%$ |
| Provost Area | $19 \%$ | $2 \%$ | $23 \%$ | $29 \%$ | $14 \%$ | $30 \%$ |
| Health Sciences | $21 \%$ | $20 \%$ | $27 \%$ | $23 \%$ | $24 \%$ | $34 \%$ |
| Total | $20 \%$ | $13 \%$ | $25 \%$ | $26 \%$ | $19 \%$ | $32 \%$ |

## Summary

## -Lots of good news

- \% of women at the higher ranks continues to increase
- On the Pittsburgh campus, salary ratios hover around $100 \%$
- On the regional campuses, more variability in salary ratios, although they hover around 100\%
- \% of women in leadership positions continues to increase, especially BOT and department/division chairs


## Summary

## - Some areas for investigation

- On the Pittsburgh campus, lower salary ratios for Full Professors - both AS and T/TS
- On the regional campuses, lower salary ratios for T/TS Full Professors and AS Instructors/Lecturers


## Actions

-Will deliver presentation to the COD and other interested committees
-The provost will review salary ratios (using most recent data) with deans/regional campus presidents

## QUESTIONS?

奖" University of
Pittsburgh

