# Gender Pay Equity Study Danforth Campus 2016 

Presentation to the Faculty Senate Council

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## 2016 Committee Members

- Todd Decker, Arts \& Sciences
- Hillary Anger Elfenbein, Business (Co-chair)
- Pauline Kim, Law
- Igor Marjanovic, Design \& Visual Arts
- Tim McBride, Brown School
- Shanta Pandey, Brown School (Co-chair)
- Bob Pollak, Arts \& Sciences and Business
- Shelly Sakiyama-Elbert, Engineering
- Ex-officio Members:
- Lynn McCloskey, Assistant Provost
- Lisa Wiland, Director, Institutional Research
- Tao Zhang, Senior Research Analyst

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## Committee's Tasks

- Analyze gender pay equity for Danforth campus schools, using 2014-15 pay data
- Full Appointment Salary
- Base salary
- Salary for additional administrative roles
- Total Actual Pay
- Appointment salary
- Summer research: internal and external funds
- Extra teaching
- Other pay (honorariums, project pay, etc.)
- For comparison with previous GPE studies, analyses using the former methodology


## Gender Coefficients

|  | Total <br> Actual <br> Pay <br> (TAP) | Actual Pay Minus <br> Externally-Funded <br> Summer Research <br> (APMESR) | Full <br> Appointment <br> Salary <br> (FAS) |
| :--- | :---: | :---: | :---: |
| Arts \& Sciences | $-4.5 \%$ | $-1.4 \%$ | $0.2 \%$ |
| Brown School | $-7.9 \%$ | $-3.0 \%$ | $-2.6 \%$ |
| Business | $-1.5 \%$ | $-1.4 \%$ | $0.3 \%$ |
| Design \& Visual Arts | $-5.0 \%$ | $-5.0 \%$ | $-2.9 \%$ |
| Engineering | $-3.0 \%$ | $-1.2 \%$ | $0.8 \%$ |
| Law | $-6.4 \%$ | $-6.0 \%$ | $-3.4 \%$ |

Negative coefficients indicate women paid less
Models include control variables:
a rank and discipline salary index variable, an indicator for URM, indicators for rank and endowed chair, indicators for two levels of administrative role (chair equivalent and other), and four time variables (years since degree, square of years since degree, years on tenure track at WU , square of years on tenure track at WU)

- Female coefficient negative for TAP for all 6 schools
- Female coefficient smaller for FAS
- Therefore, much of the gender gap is in supplemental sources

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## Female Coefficients: Total Actual Pay



- Whiskers indicate $2 \times$ Standard Errors
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## Digging Deeper into Supplemental Pay

- A higher proportion of men hold administrative roles with supplemental salary (16\% vs. 11\%)
- In Engineering, STEM fields of A\&S, and Brown School, women are less likely to have externally funded summer research pay:
- A\&S STEM fields: $62 \%$ of men vs. $55 \%$ of women had external summer research funds
- Engineering: 75\% of men vs. 70\% of women
- Brown School: $89 \%$ of men vs. $54 \%$ of women
- In Business, among tenured faculty, the average overload teaching pay to men as \% of salary was 3.2 x as much as to women

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## Historical Comparison: 9-Month Equiv. Appointment Salary

|  | $2008-09$ | $2011-12$ | $2014-15$ |
| :--- | :---: | :---: | :---: |
| Arts \& Sciences | $-1.2 \%$ | $-0.8 \%$ | $-0.8 \%$ |
| Brown School | $-4.1 \%$ | $1.9 \%$ | $-2.7 \%$ |
| Business | $-3.7 \%$ | $0.5 \%$ | $4.4 \%$ |
| Design \& Visual Studies | $-5.0 \%$ | $1.4 \%$ | $-2.2 \%$ |
| Engineering | $-0.8 \%$ | $-0.6 \%$ | $-1.7 \%$ |
| Law | $-3.0 \%$ | $-3.1 \%$ | $-6.8 \%$ |

Historical approach has multiple indicators for discipline groups, single indicator for salaried administrative role

- Mixed historical results
- Since 2008-09, smaller gender gap in 4 of 6 schools
- Since 2011-12, larger gender gap in 4 of 6 schools

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## Limitations

- Correlation, not causation
- No control variable for quality
- Differences in supplemental pay could result from lack of opportunities offered or a choice not to accept them
- Analyses limited to financial compensation
- Did not include, e.g., teaching load and releases, course preps, lab space, start-up funds, etc.
- $\mathbf{R}^{2}$ for Law lower than for other schools


## Policy Recommendations: Extramural Grants

- External grant funding is outside of WU's direct control
- NIH evidence suggests gender gap in applications
- Therefore, resources can be dedicated to support maximally competitive grant proposals from all faculty
- Resources include seed grants, systematic mentoring programs, funds for friendly review
- Additional proactive administrative support can identify potential grant sources, particularly those calls for proposals spread through networks

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## Policy Recommendations: Paid Administrative Roles, Teaching

- Deans should report to the Provost the process by which opportunities are offered for teaching pay, summer research pay, course releases, and other sources applicable to the School
- Greater transparency for supplemental pay
- Balance confidentiality with sharing information
- Deans can make available information about extra pay for supplemental source
- Some faculty may not be aware of extent of these sources

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## Policy Recommendations: Salary Negotiations

- Gender gap from less visible sources is consistent with negotiations research
- Women tend to gain less in salary negotiations
- Especially ambiguous, discretionary, individually negotiated
- The role of negotiation for pay equity looms large
- During initial hiring, promotion, and retention
- Deans should be mindful during compensation negotiations
- Deans should report to the Provost yearly the response to each outside offer
- Explore potential gender inequities
- Explore whether women less likely to bring outside offers
- Potentially from family 'movability' or lesser gamesmanship

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## Recommendations for GPE Studies

- Continue GPE studies every 3 years
- Opportunity to monitor potential inequities
- Opportunity for Deans to see changes over time
- Maintain improvements in methodology
- Total Pay offers more complete information
- Better explanatory variables
- Single index variable for discipline
- Two variables for administrative roles, Criteria for exclusions
- Additional topics for research
- Likelihood of pursuing outside offers
- Longitudinal analyses
- Salary discontinuities, time as Associate Professor
- Pay equity for non tenured/tenure-track faculty

