Commission on the Status of Women

Vagelos College of Physicians and Surgeons Pipeline Study:
Advancement of Women Faculty through the Academic Ranks

Presentation to Senate Plenary,
February 2, 2018
• The Commission seeks to answer the following questions:
  • What has been the progress of female faculty through the academic pipeline and how does it compare with the progress of male faculty?
  • Are there leaks in the pipeline and, if yes, where are they?
  • What needs to be done to address leaks and promote equity at all levels?

• Brief history of pipeline studies
  • Arts and Sciences: 2001; 2015
  • College of Physicians and Surgeons (P&S) initiated in 2015
2015-2016: Initiation of Study

2016-present: Worked with the Academic Affairs division in the Office of the Provost (Faculty Affairs and Academic Appointments)

Data:
- Drawn from PeopleSoft and reviewed by Academic Affairs
- Snapshot data taken on November 1 each year from 2007-08 to 2016-17

Structure:
- **Data 1**: Position department + primary appointment
- **Data 2**: Administrative department

Analyzed by Dr. Melanie Wall, Director of Biostatistics, Psychiatry, CUMC
We wish to thank the Office of the Vice Provost for Faculty Affairs and the Office of Academic Appointments for their essential assistance with this study:

- Christopher Brown  Vice Provost for Faculty Affairs
- Carmen DeLeon  Assistant Provost for Academic Appointments
- Angel Flesher  Assistant Provost for Faculty Affairs
- Anna Makkar  Associate Director of Operations and Analytics
- Art Palmer  Interim Vice Provost for Faculty Affairs
- Zeid Sitnica  Assistant Provost for Academic Appointments
- Pearl Spiro  Associate Provost for Academic Appointments
Over the period 2007-08 to 2016-17, there has been a 30% increase in the number of women faculty and a 1% increase in the number of men faculty.

By 2016-17, women faculty accounted for 46% of total faculty, up from 40% in 2007-08.
The greatest increases have been seen on the nontenure track where there has been a:

- 4% increase in men faculty
- 37% increase in women faculty

Women faculty now account for 51% of all nontenure track faculty.
Vagelos College of Physicians and Surgeons Pipeline Study

Tenure status: Tenured

- **4 to 1 ratio of Men to Women who are tenured**

In ten years:
- Tenured men increased by 41
- Tenured women increased by 11
Over this period, the number of tenure track faculty has declined in both men and women.

Still 1.6 men for every 1 woman on the tenure track in 2016-17.
Vagelos College of Physicians and Surgeons Pipeline Study
Share of Women Faculty by Tenure Type

Percent of Women by Type of P&S Faculty 2007-08 to 2016-17

- **1. Tenured**
- **2. Tenure-Track**
- **3. Other Non-TT**
- **Total**

Year:
- 2008: 18.2%
- 2009: 35.3%
- 2010: 40%
- 2011: 43.9%
- 2012: 45.6%
- 2013: 48.6%
- 2014: 50.5%
- 2015: 51.2%
- 2016: 51.1%
- 2017: 50.5%

Women Faculty by Tenure Type:
- **Tenured**: Increase from 18.2% to 50.5%
- **Tenure-Track**: Increase from 35.3% to 51.2%
- **Other Non-TT**: Increase from 45.6% to 51.1%
- **Total**: Increase from 43.9% to 50.5%
Percent of total P&S faculty who are tenured or tenure track

- **Men**
  - 2007: 30.7%
  - 2017: 29.3%

- **Women**
  - 2007: 18.6%
  - 2017: 13.5%
Vagelos College of Physicians and Surgeons Pipeline Study Leadership and Gender

<table>
<thead>
<tr>
<th>Unit</th>
<th>Total Number</th>
<th>Male Leadership</th>
<th>Female Leadership</th>
<th>Male Leadership (%)</th>
<th>Female Leadership (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department¹</td>
<td>27</td>
<td>24</td>
<td>3</td>
<td>88.9%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Division²</td>
<td>85</td>
<td>62</td>
<td>23</td>
<td>72.9%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Center³</td>
<td>15</td>
<td>13</td>
<td>2</td>
<td>86.7%</td>
<td>13.3%</td>
</tr>
</tbody>
</table>

¹ Departments of Emergency Medicine and Medical Humanities and Ethics are included
² Divisions of Emergency Medicine and Medical Humanities and Ethics are not included, information not available at time of preparation
³ Trustee approved Centers
# Leadership and Gender by division

<table>
<thead>
<tr>
<th>Unit</th>
<th>Total Number</th>
<th>Men</th>
<th>Women</th>
<th>Women % of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divisional chiefs*</td>
<td>84</td>
<td>61</td>
<td>23</td>
<td>27.4%</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>33.3%</td>
</tr>
<tr>
<td>Medicine**</td>
<td>13</td>
<td>11</td>
<td>2</td>
<td>15.4%</td>
</tr>
<tr>
<td>Neurology</td>
<td>12</td>
<td>9</td>
<td>3</td>
<td>25.0%</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>50.0%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>15</td>
<td>8</td>
<td>7</td>
<td>46.7%</td>
</tr>
<tr>
<td>Radiology</td>
<td>11</td>
<td>9</td>
<td>2</td>
<td>18.2%</td>
</tr>
<tr>
<td>Surgery***</td>
<td>18</td>
<td>15</td>
<td>3</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

*Divisional Chiefs: Data does not include Psychiatry.
**Medicine: 13 divisions with chiefs included (14 divisions in total)
***Surgery: 18 divisions with chiefs included (35 divisions in total)
To better understand the experience of women faculty, findings from the University Senate Faculty Quality of Life Survey 2015-16 are included in the appendix.

<table>
<thead>
<tr>
<th>School</th>
<th>Women as a Count or Percentage of Women and Men Tenured Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yale</td>
<td>33%</td>
</tr>
<tr>
<td>Brown</td>
<td>27%</td>
</tr>
<tr>
<td>Johns Hopkins</td>
<td>22%</td>
</tr>
<tr>
<td>Michigan</td>
<td>22%</td>
</tr>
<tr>
<td>NYU</td>
<td>20%</td>
</tr>
<tr>
<td>Harvard</td>
<td>15%</td>
</tr>
</tbody>
</table>

1. Annual reporting to review and assess the progress of women faculty

2. Attain equal representation of women in the tenured ranks

3. Suggested pathways for success:
   - Equal representation of women in leadership positions within 10 years
   - Targeted hires of senior women
   - Implementation of best practices in hiring to chief positions
   - National searches for all leadership positions
Questions?
Thank you
Appendices
### Table 1A: Columbia University P&S Faculty

Summary counts of faculty by Type, Rank, and Gender 2016-17 (N=2114) vs. 10 years earlier 2007-08 (N=1879)

Faculty defined by Position Department - Primary Appointment

<table>
<thead>
<tr>
<th></th>
<th>2016-17</th>
<th></th>
<th></th>
<th>2007-08</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Men</td>
<td>Women</td>
<td>%Women</td>
<td>Total</td>
<td>Men</td>
</tr>
<tr>
<td>Tenured</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>250</td>
<td>203</td>
<td>47</td>
<td>18.8%</td>
<td>198</td>
<td>162</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>199</td>
<td>165</td>
<td>34</td>
<td>17.1%</td>
<td>170</td>
<td>140</td>
</tr>
<tr>
<td>Tenure-Track</td>
<td>191</td>
<td>119</td>
<td>72</td>
<td>37.7%</td>
<td>249</td>
<td>161</td>
</tr>
<tr>
<td>Professor</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>25.0%</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>16</td>
<td>13</td>
<td>3</td>
<td>18.8%</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>166</td>
<td>99</td>
<td>67</td>
<td>40.4%</td>
<td>218</td>
<td>140</td>
</tr>
<tr>
<td>Instructor</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.0%</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Other Non-tenure track</td>
<td>1673</td>
<td>828</td>
<td>845</td>
<td>50.5%</td>
<td>1432</td>
<td>804</td>
</tr>
<tr>
<td>Professor Clinical/of Clinical/Hosp/CUMC</td>
<td>244</td>
<td>169</td>
<td>75</td>
<td>30.7%</td>
<td>207</td>
<td>154</td>
</tr>
<tr>
<td>Associate Professor Clinical/Hosp/CUMC</td>
<td>298</td>
<td>166</td>
<td>132</td>
<td>44.3%</td>
<td>286</td>
<td>189</td>
</tr>
<tr>
<td>Assistant Professor Clinical/CUMC</td>
<td>997</td>
<td>438</td>
<td>559</td>
<td>56.1%</td>
<td>760</td>
<td>381</td>
</tr>
<tr>
<td>Instructor in Clinical/CUMC</td>
<td>134</td>
<td>55</td>
<td>79</td>
<td>59.0%</td>
<td>179</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>2114</td>
<td>1150</td>
<td>964</td>
<td>45.6%</td>
<td>1879</td>
<td>1127</td>
</tr>
</tbody>
</table>

*Summary data does not include Tenure of Title or Associate in Clinical*

**Source:** Office of Academic Appointments, Office of the Vice Provost for Faculty Affairs
### Table 18: Columbia University P&S faculty. Summary counts of faculty by Type, Rank, and Gender 2016-17 (N=2161) vs. 10 years earlier 2007-08 (N=1891)

<table>
<thead>
<tr>
<th></th>
<th>2016-17</th>
<th></th>
<th></th>
<th>%Women</th>
<th>2007-08</th>
<th></th>
<th></th>
<th>%Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Men</td>
<td>Women</td>
<td></td>
<td>Total</td>
<td>Men</td>
<td>Women</td>
<td></td>
</tr>
<tr>
<td>Tenured</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>259</td>
<td>206</td>
<td>53</td>
<td>20.5%</td>
<td>201</td>
<td>164</td>
<td>37</td>
<td>18.4%</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>49</td>
<td>36</td>
<td>13</td>
<td>26.5%</td>
<td>25</td>
<td>20</td>
<td>5</td>
<td>20.0%</td>
</tr>
<tr>
<td>Tenure-Track</td>
<td>192</td>
<td>120</td>
<td>72</td>
<td>37.5%</td>
<td>248</td>
<td>160</td>
<td>88</td>
<td>35.5%</td>
</tr>
<tr>
<td>Professor</td>
<td>10</td>
<td>8</td>
<td>2</td>
<td>20.0%</td>
<td>10</td>
<td>7</td>
<td>3</td>
<td>30.0%</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>17</td>
<td>14</td>
<td>3</td>
<td>17.6%</td>
<td>19</td>
<td>13</td>
<td>6</td>
<td>31.6%</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>164</td>
<td>97</td>
<td>67</td>
<td>40.9%</td>
<td>213</td>
<td>137</td>
<td>76</td>
<td>35.7%</td>
</tr>
<tr>
<td>Instructor</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.0%</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>50.0%</td>
</tr>
<tr>
<td>Other Non-tenure track</td>
<td>1710</td>
<td>834</td>
<td>876</td>
<td>51.2%</td>
<td>1442</td>
<td>806</td>
<td>636</td>
<td>44.1%</td>
</tr>
<tr>
<td>Professor Clinical/or Clinical/Hosp/CUMC</td>
<td>248</td>
<td>169</td>
<td>79</td>
<td>31.9%</td>
<td>212</td>
<td>157</td>
<td>55</td>
<td>25.9%</td>
</tr>
<tr>
<td>Associate Professor Clinical/or Clinical/Hosp/CUMC</td>
<td>304</td>
<td>166</td>
<td>138</td>
<td>45.4%</td>
<td>296</td>
<td>191</td>
<td>105</td>
<td>35.5%</td>
</tr>
<tr>
<td>Assistant Professor Clinical/or Clinical/Hosp/CUMC</td>
<td>1020</td>
<td>447</td>
<td>573</td>
<td>56.2%</td>
<td>757</td>
<td>379</td>
<td>378</td>
<td>49.9%</td>
</tr>
<tr>
<td>Instructor in Clinical/CUMC</td>
<td>138</td>
<td>52</td>
<td>86</td>
<td>62.3%</td>
<td>177</td>
<td>79</td>
<td>98</td>
<td>55.4%</td>
</tr>
<tr>
<td>Total</td>
<td>2161</td>
<td>1160</td>
<td>1001</td>
<td>46.3%</td>
<td>1891</td>
<td>1130</td>
<td>761</td>
<td>40.2%</td>
</tr>
</tbody>
</table>

Summary data does not include Tenure of Title or Associate in Clinical

Source: Office of Academic Appointments, Office of the Vice Provost for Faculty Affairs
University Senate
Faculty Quality of Life Survey 2015-2016

Vagelos College of Physicians and Surgeons
Faculty Satisfaction by Gender: Brief Report

February 2, 2018
41 percent response rate, consistent with Morningside and CUMC

Overall, 71 percent of the faculty are satisfied being a faculty member

Areas of highest satisfaction:
- Quality of students, Library resources, Current rank, Benefits package

Areas of highest dissatisfaction:
- Administrative staff to assist with patients, research funds, support for securing grants, clinical staff to assist with patients

Key areas of stress for faculty:
- Clinical responsibilities, securing funding for research, department / campus politics

Faculty are satisfied with their life outside of work (90%) and feel they can integrate work with family obligations (64%)

 Nonetheless, 32 percent state that they are likely to leave Columbia within three years

Selected items to highlight areas where policy and practice may be improved to respond to existing disparity in faculty experience, specifically to improve support for female faculty
Overall, how satisfied are you with the resources Columbia University provides to support your research and scholarship?

- On Morningside, 63 percent of faculty are satisfied with resources and 23 percent are dissatisfied
- At CUMC and P&S, 43 percent of the faculty are satisfied and 37 percent dissatisfied
- Within P&S, more female faculty are dissatisfied with resources to support their research and scholarship than are satisfied

Morningside n=546; CUMC n=954; P&S n=692; P&S Female n=368; P&S Male n=397
Satisfaction with Resources to Support Clinical Duties

Overall, how satisfied are you with the resources Columbia University provides to support your clinical duties?

- At CUMC, almost as many faculty are dissatisfied as are satisfied with resources to support clinical duties.
- More P&S faculty are dissatisfied than satisfied with resources to support clinical duties.
- Within P&S, female faculty are more dissatisfied than satisfied, compared to male faculty with resources to support their clinical duties.

CUMC n=665; P&S n=594; P&S Female n=280; P&S Male n=292
P&S Faculty Satisfaction in key areas: (1) Salary

More specifically, please indicate the degree to which you are satisfied with each of the following: Salary

- Among female P&S faculty, as many are dissatisfied with salary as are satisfied.
- 43 percent of female P&S faculty are satisfied with their salary as compared with 54 percent of male P&S faculty

Morningside n=531; CUMC n=937; P&S n=779; P&S Female n=361; P&S Male n=391
P&S Faculty Satisfaction in key areas: (2) Research Funds

More specifically, please indicate the degree to which you are satisfied with each of the following: Research funds

- Among female P&S faculty, more than twice as many are dissatisfied with research funds as are satisfied
- 19 percent of female P&S faculty are satisfied with research funds as compared with 33 percent of male P&S faculty

Morningside n=483; CUMC n=716; P&S n=589; P&S Female n=261; P&S Male n=310
More specifically, please indicate the degree to which you are satisfied with each of the following: Clinical responsibilities

- Among female P&S faculty, less than 60 percent are satisfied with their clinical responsibilities as compared with 72 percent of male faculty

CUMC n=639; P&S n=572; P&S Female n=269; P&S Male n=282
Climate and Opportunities (1)

Please indicate your agreement or disagreement with the following statements regarding your department or school

I feel recognized for my contribution to Columbia University

[Morningside n=472; CUMC n=786; P&S n=647; P&S Female n=304; P&S Male n=324]

I have the resources I need to do my job well

[Morningside n=478; CUMC n=788; P&S n=650; P&S Female n=305; P&S Male n=325]
I have a voice in the decision-making that affects the direction of my department/school

[Morningside n=471; CUMC n=781; P&S n=642; P&S Female n=298; P&S Male n=324]

I feel excluded from an informal network in my department/school

[Morningside n=466; CUMC n=760; P&S n=624; P&S Female n=291; P&S Male n=314]
Climate and Opportunities (3)

I have to work harder than some of my colleagues to be taken seriously

[Morningside n=468; CUMC n=764; P&S n=630; P&S Female n=294; P&S Male n=317]
Climate and Opportunities (4)

My chair/dean helps me obtain the resources I need

[Morningside n=445; CUMC n=767; P&S n=633; P&S Female n=295; P&S Male n=318]

My department / school is a place where individuals may comfortably raise personal and/or family responsibilities when scheduling obligations

[Morningside n=450; CUMC n=762; P&S n=629; P&S Female n=294; P&S Male n=316]
I feel that the climate and opportunities for female faculty in my department/school are at least as good as those for male faculty

[Morningside n=451; CUMC n=750; P&S n=618; P&S Female n=307; P&S Male n=291]

I feel that the climate and opportunities for minority faculty in my department/school are at least as good as those for non-minority faculty

[Morningside n=419; CUMC n=711; P&S n=582; P&S Female n=265; P&S Male n=298]
End of Presentation