# SCESF Report on the Economic Status of the Faculty 

Fiscal Year 2020: July 1, 2019 through June 30, 2020

The Senate Committee on the Economic Status of the Faculty (SCESF) is charged by the "Rules of the Faculty Senate" to:

- Gather and organize data on faculty salaries and benefits;
- Issue an annual report on the economic status of the faculty; and
- Represent the faculty in the determination of University policy on salary issues.

Because of extenuating circumstances related to the COVID-19 pandemic, SCESF did not submit a report this year. In keeping with practices of previous years, SCESF offers below the publicly viewable tables provided to the committee by the Provost's Office and prepared by the Office of Institutional Research \& Analysis.

Table 1
Average academic base salary percentage increases of continuing Penn standing faculty members by rank in comparison with the Consumer Price Index (CPI) and Penn Budget Guidelines

| Group/Condition/Metric |  | FY 2019-2020 |
| :--- | :--- | ---: |
|  | Mean | $4.3 \%$ |
| Professor | Median | $3.0 \%$ |
|  | Mean | $4.8 \%$ |
| Associate Professor | Median | $3.0 \%$ |
|  | Messistant Professor | Mean |
| All Three Ranks | Mean | $3.6 \%$ |
|  | Median | $4.3 \%$ |
|  | $3.0 \%$ |  |
|  |  |  |
| U.S. City Average CPI Growth | Mean | $0.7 \%$ |
| Phil. CPI Growth | Mean | $0.1 \%$ |
| Budget Guidelines | Mean | $3.0 \%$ |

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

FY 2019-2020 CPI growth for the U.S. and for Philadelphia are based on a change in CPI from June 2019 to June 2020.

Table 2
Percentage of continuing standing faculty awarded salary increase percentages that exceeded the percentage growth in the consumer price index (CPI) for Philadelphia

| Schools and Disciplinary Areas | Percentage FY $\mathbf{2 0 1 9}$ to $\mathbf{2 0 2 0}$ |
| :--- | :--- |
| Annenberg | $100.0 \%$ |
| Dental Medicine | $100.0 \%$ |
| Engineering \& Applied Science | $97.4 \%$ |
| Graduate Education | $100.0 \%$ |
| Humanities (A\&S) | $100.0 \%$ |
| Law | $100.0 \%$ |
| Natural Science (A\&S) | $99.4 \%$ |
| Nursing | $100.0 \%$ |
| Perelman-Basic Science | $89.8 \%$ |
| Social Policy \& Practice | $100.0 \%$ |
| Social Science (A\&S) | $97.4 \%$ |
| Veterinary Medicine | $100.0 \%$ |
| Weitzman | $100.0 \%$ |
| Wharton | $99.5 \%$ |
| All Schools/Areas | $97.9 \%$ |
| U.S. City Average CPI Growth | $0.7 \%$ |
| Phil CPI Growth | $0.1 \%$ |
| Budget Guidelines | $3.0 \%$ |

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

CPI reported for FY 2019-20 for the US and Philadelphia are based on growth for the period between June 2019 to June 2020.

Table 3
Percentage of continuing FULL PROFESSORS awarded salary increase percentages that exceeded the percentage growth in the consumer price index (CPI) for Philadelphia

| Schools and Disciplinary Areas | Percentage FY 2019 to 2020 |
| :--- | :--- |
| Annenberg | $100.0 \%$ |
| Dental Medicine | $100.0 \%$ |
| Engineering \& Applied Science | $96.1 \%$ |
| Graduate Education | $100.0 \%$ |
| Humanities (A\&S) | $100.0 \%$ |
| Law | $100.0 \%$ |
| Natural Science (A\&S) | $100.0 \%$ |
| Nursing | $100.0 \%$ |
| Perelman-Basic Science | $85.7 \%$ |
| Social Policy \& Practice | $100.0 \%$ |
| Social Science (A\&S) | $97.0 \%$ |
| Veterinary Medicine | $100.0 \%$ |
| Weitman | $100.0 \%$ |
| Wharton | $99.2 \%$ |
| All Schools/Areas | $97.3 \%$ |
| U.S. City Average CPI Growth | $0.7 \%$ |
| Phil. CPI Growth | $0.1 \%$ |
| Budget Guidelines | $3.0 \%$ |

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

CPI reported for FY 2019-20 for the US and Philadelphia are based on growth for the period between June 2019 to June 2020.

Table 4
Rank of mean salaries of Penn faculty by academic fields as compared to universities participating in the

| Acade Field | American | Association | of Universit | S Data Exch | ange (AAUD | ) survey. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic Field | Fall 2011 | Fall 2012 | Fall 2013 | Fall 2014 | Fall 2015 | Fall 2016 | Fall 2017 | Fall 2018 |
| Full Professor |  |  |  |  |  |  |  |  |
| Annenberg | 1/41 | 1/39 | 1/43 | 1/43 | 1/43 | 1/42 | 1/41 | 1/44 |
| Dental Medicine | 10/45 | 9/43 | 9/44 | 11/44 | 10/46 | 11/45 | 15/46 | 17/49 |
| Engineering \& Applied Science | 13/55 | 14/54 | 13/58 | 14/59 | 17/59 | 16/56 | 11/56 | 16/62 |
| Graduate Education | 6/47 | $7 / 45$ | 4/45 | 6/45 | 6/47 | 6/45 | 6/47 | 11/48 |
| Humanities (A\&S) | 7/56 | 11/55 | 11/58 | 10/59 | 11/60 | 10/57 | 9/57 | 9/62 |
| Law | 7/39 | 8/38 | 7/39 | 8/38 | 6/41 | 6/40 | 4/38 | 6/43 |
| Natural Science (A\&S) | 12/56 | 11/55 | 14/58 | 15/59 | 18/60 | 14/57 | 13/57 | 17/62 |
| Nursing | 1/19 | 1/19 | 1/21 | 3/23 | 1/24 | 2/24 | 2/30 | 2/31 |
| Perelman - Basic Science | 6/56 | 8/55 | 7/58 | 8/59 | 9/60 | 6/57 | 6/57 | 10/62 |
| Social Policy \& Practice | 6/25 | 6/23 | 6/26 | 4/27 | 3/27 | 3/26 | 1/25 | 1/27 |
| Social Science (A\&S) | 8/56 | 9/55 | 9/57 | 9/58 | $7 / 59$ | 9/57 | 8/57 | 7/61 |
| Veterinary Medicine | 3/14 | 4/13 | 2/13 | 3/13 | 4/13 | 5/14 | 4/16 | 3/16 |
| Weitzman | 10/53 | 11/52 | 10/55 | 11/56 | 11/57 | 10/54 | 10/52 | 11/57 |
| Wharton-Business \& Management | 5/53 | 2/52 | 3/55 | 2/56 | 1/56 | 1/53 | 1/53 | 2/58 |
| Wharton-Public Policy | 13/54 | 12/53 | 5/55 | 9/56 | 10/57 | 9/55 | 9/55 |  |
| Wharton-Statistics | 1/34 | 2/34 | 2/36 | 2/34 | 1/34 | 1/32 | 1/31 | 2/36 |
| Associate Professor |  |  |  |  |  |  |  |  |
| Annenberg |  |  |  |  |  |  |  |  |
| Dental Medicine | 13/43 | 9/41 | - | 6/44 |  |  |  |  |
| Engineering \& Applied Science | 11/54 | 11/53 | 10/56 | 11/57 | 10/57 | 7/54 | 7/55 | 11/61 |
| Graduate Education | 8/45 | 9/44 | 9/44 | 6/45 | 6/47 | 6/44 | 6/46 | 14/48 |
| Humanities (A\&S) | 11/55 | 13/54 | 12/57 | 10/58 | 9/59 | 10/56 | 8/56 | 8/61 |
| Law |  |  |  |  |  |  |  |  |
| Natural Science (A\&S) | 15/56 | 17/55 | 17/58 | 15/58 | 17/59 | 18/56 | 15/56 | 20/61 |
| Nursing | 5/19 | 3/19 | 2/21 | 7/24 | 7/25 | 4/25 | 5/31 | 6/31 |
| Perelman - Basic Science | 4/55 | 4/54 | 3/57 | 4/58 | 5/59 | 5/56 | 6/56 | 11/61 |
| Social Policy \& Practice |  |  |  |  |  | 6/26 | 4/25 | 6/28 |
| Social Science (A\&S) | 8/56 | 14/55 | 10/56 | 7/57 | 8/58 | 10/56 | 8/56 | 12/60 |
| Veterinary Medicine | 6/14 | 6/13 | 7/13 | 7/13 | 4/13 | 4/14 | 6/15 | 6/15 |
| Weitzman | 1/51 | 3/51 | 3/52 | 3/54 | 4/56 | 6/53 | 6/53 | 9/57 |
| Wharton-Business \& Management | 2/51 | 2/51 | 3/54 | 3/56 | 3/56 | 1/53 | 1/53 | 2/58 |
| Wharton-Public Policy |  |  |  |  |  |  |  | 2/56 |
| Wharton-Statistics | 2/27 | 2/30 | - |  | - | - | 1/27 |  |
| Assistant Professor |  |  |  |  |  |  |  |  |
| Annenberg | - |  | 3/41 | 3/42 |  | 2/40 |  |  |
| Dental Medicine |  |  |  |  |  |  |  |  |
| Engineering \& Applied Science | 7/54 | 8/54 | 8/58 | 10/59 | 6/59 | 7/56 | 8/56 | 8/61 |
| Graduate Education |  | 15/43 | 12/44 | 13/44 | 11/46 | 13/44 | 10/45 | 12/47 |
| Humanities (A\&S) | 14/56 | 17/55 | 14/58 | 13/59 | 9/59 | 9/56 | 8/56 | 12/61 |
| Law | 6/27 |  |  |  |  |  |  |  |
| Natural Science (A\&S) | 15/56 | 22/55 | 16/58 | 18/59 | 20/60 | 18/57 | 12/57 | 17/62 |
| Nursing | 3/19 | 2/19 | 3/21 | 5/24 | 5/25 | 4/25 | 8/31 | 8/31 |
| Perelman - Basic Science | 6/56 | 9/55 | 9/58 | 10/59 | 15/60 | 5/57 | 6/57 | 9/61 |
| Social Policy \& Practice |  | 5/24 | 5/26 | 5/27 | 6/27 | 8/26 | 3/25 |  |
| Social Science (A\&S) | 7/56 | 8/55 | 7/57 | 8/58 | 11/59 | 14/57 | 13/57 | 17/61 |
| Veterinary Medicine | 5/14 | 5/12 | 5/13 | 5/13 | 5/13 | 4/14 | 8/16 | 8/15 |
| Weitzman | 6/51 | 4/50 | 5/54 | 7/55 | 7/56 | 5/52 | 5/52 | 6/56 |
| Wharton-Business \& Management | $4 / 52$ | 4/51 | 5/54 | 7/55 | 4/56 | 4/53 | 5/53 | 4/58 |
| Wharton-Public Policy | 1/54 | 1/53 | 1/52 | 1/55 | 1/56 | 1/55 | 1/55 | 1/59 |
| Wharton-Statistics |  |  | - | - | - |  |  |  |

Using the federal CIP (Classification of Instructional Programs) codes for 2010, departments at comparable universities were mapped to Penn Schools.
Calculations of rank only include those universities that have relevant departments. Therefore, the number of universities among which Penn is ranked varies by field.

Rank is suppressed for all cells which contain fewer than five Penn faculty members.

Table 5
Percentage differences in mean academic base salary of professors at selected research universities for Academic Years 2011-2012 through 2019-2020

|  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Full Professors - Mean Academic Base Salaries: Percentage Differences* |  |  |  |  |  |  |  |  |  |
| Columbia | 8.9\% | 13.5\% | 12.1\% | 13.4\% | 16.6\% | 16.8\% | 15.6\% | 16.1\% | 13.1\% |
| Stanford | 7.6\% | 10.9\% | 11.9\% | 13.6\% | 13.3\% | 13.1\% | 13.3\% | 14.5\% | 10.4\% |
| Princeton | 6.7\% | 7.0\% | 7.2\% | 9.3\% | 9.9\% | 9.7\% | 9.5\% | 10.9\% | 7.5\% |
| Harvard | 9.3\% | 8.6\% | 7.7\% | 8.1\% | 8.7\% | 8.8\% | 13.1\% | 9.3\% | 7.0\% |
| Chicago | 8.9\% | 8.9\% | 9.6\% | 10.0\% | 14.7\% | 9.0\% | 7.8\% | 8.2\% | 3.7\% |
| Yale | -0.7\% | -0.4\% | -0.1\% | 0.5\% | 0.4\% | 0.1\% | -1.4\% | 3.3\% | 2.1\% |
| MIT | -5.4\% | -4.4\% | -3.3\% | -1.8\% | 0.0\% | 1.4\% | 2.5\% | 3.8\% | 1.3\% |
| Penn | \$181.6 | \$187.0 | \$192.3 | \$197.5 | \$202.6 | \$209.2 | \$217.3 | \$223.60 | \$237.30 |
| Duke | -3.5\% | -3.6\% | -3.1\% | -2.1\% | -2.4\% | -2.4\% | -3.5\% | -4.2\% | -6.7\% |
| Dartmouth | -10.7\% | -10.5\% | -9.5\% | -9.6\% | -9.0\% | -9.6\% | -9.5\% | -7.1\% | -8.9\% |
| Brown | -13.7\% | -14.0\% | -14.4\% | -14.6\% | -14.3\% | -14.5\% | -15.4\% | -16.1\% | -18.9\% |
| Cornell | -10.9\% | -14.5\% | -14.2\% | -14.2\% | -13.6\% | -16.7\% | -17.8\% | -17.9\% | -20.7\% |

NOTES: Excluded are all members of the faculty of PSOM (except basic scientists) and all clinician-educators. Data source: AAUP Salary Surveys.
*Universities are listed from highest to lowest percentage difference for full professors as of 2019-2020. For each year reported, the difference between the Penn mean salary and the mean salary for a comparison university was computed as a percentage of the Penn salary.

|  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Associate Professors - Mean Academic Base Salaries: Percentage Differences* |  |  |  |  |  |  |  |  |  |
| Columbia | 6.1\% | 12.9\% | 21.6\% | 21.2\% | 20.0\% | 20.4\% | 15.1\% | 19.3\% | 20.6\% |
| Stanford | 11.4\% | 15.2\% | 17.3\% | 13.0\% | 9.2\% | 11.3\% | 12.6\% | 13.7\% | 15.2\% |
| MIT | 2.1\% | 4.5\% | 6.4\% | 7.0\% | 3.2\% | 6.2\% | 6.4\% | 9.0\% | 11.7\% |
| Princeton | 5.0\% | 10.1\% | 8.5\% | 6.2\% | 4.5\% | 4.6\% | 2.6\% | 2.8\% | 5.8\% |
| Harvard | 2.6\% | 1.4\% | 3.6\% | 2.3\% | -2.3\% | -5.6\% | 8.3\% | 0.5\% | 3.6\% |
| Yale | -7.8\% | -3.6\% | -1.0\% | -6.3\% | -7.7\% | -3.0\% | -3.6\% | -6.6\% | 0.1\% |
| Penn | \$117.8 | \$117.3 | \$119.5 | \$125.2 | \$132.3 | \$135.0 | \$140.1 | \$143.9 | \$145.6 |
| Duke | -2.8\% | 2.3\% | 1.1\% | 1.3\% | -2.9\% | -0.3\% | -0.9\% | -1.7\% | -0.5\% |
| Dartmouth | -7.9\% | -4.9\% | -4.9\% | -9.6\% | -11.9\% | -9.6\% | -8.4\% | -5.6\% | -5.9\% |
| Chicago | -3.1\% | 0.3\% | -0.5\% | -0.7\% | -0.1\% | -5.9\% | -10.1\% | -8.1\% | -6.4\% |
| Cornell | -4.1\% | -5.6\% | -3.5\% | -5.5\% | -6.5\% | -9.1\% | -10.1\% | -9.8\% | -8.5\% |
| Brown | -15.7\% | -11.9\% | -10.0\% | -10.3\% | -13.3\% | -14.1\% | -14.3\% | -13.6\% | -13.0\% |
|  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |

Assistant Professors - Mean Academic Base Salaries: Percentage Differences*

| MIT | $-8.5 \%$ | $-8.5 \%$ | $-5.8 \%$ | $-4.4 \%$ | $-5.6 \%$ | $-5.4 \%$ | $-4.5 \%$ | $-0.4 \%$ | $1.7 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Stanford | $-2.2 \%$ | $-4.2 \%$ | $-0.4 \%$ | $2.4 \%$ | $2.1 \%$ | $0.5 \%$ | $1.0 \%$ | $3.3 \%$ | $1.7 \%$ |
| Harvard | $-2.2 \%$ | $-2.4 \%$ | $-3.0 \%$ | $-5.3 \%$ | $-2.5 \%$ | $-3.0 \%$ | $8.0 \%$ | $1.5 \%$ | $1.5 \%$ |
| Penn | $\mathbf{\$ 1 1 2 . 3}$ | $\mathbf{\$ 1 1 6 . 2}$ | $\mathbf{\$ 1 1 8 . 0}$ | $\mathbf{\$ 1 1 9 . 6}$ | $\mathbf{\$ 1 2 3 . 3}$ | $\mathbf{\$ 1 2 7 . 5}$ | $\mathbf{\$ 1 3 0 . 3}$ | $\mathbf{\$ 1 3 2 . 6}$ | $\mathbf{\$ 1 3 6 . 5}$ |
| Columbia | $-11.8 \%$ | $-9.0 \%$ | $-6.0 \%$ | $-4.6 \%$ | $-1.5 \%$ | $-3.7 \%$ | $-3.1 \%$ | $-1.8 \%$ | $-0.6 \%$ |
| Chicago | $-8.6 \%$ | $-11.6 \%$ | $-10.5 \%$ | $-6.1 \%$ | $-6.1 \%$ | $-7.3 \%$ | $-6.8 \%$ | $-3.1 \%$ | $-0.9 \%$ |
| Duke | $-14.5 \%$ | $-16.3 \%$ | $-12.3 \%$ | $-11.9 \%$ | $-10.9 \%$ | $-10.6 \%$ | $-12.4 \%$ | $-8.1 \%$ | $-9.5 \%$ |
| Princeton | $-16.1 \%$ | $-16.7 \%$ | $-13.8 \%$ | $-12.5 \%$ | $-13.0 \%$ | $-13.8 \%$ | $-11.6 \%$ | $-10.7 \%$ | $-10.3 \%$ |
| Cornell | $-13.6 \%$ | $-15.8 \%$ | $-16.6 \%$ | $-13.6 \%$ | $-8.4 \%$ | $-11.8 \%$ | $-10.5 \%$ | $-10.3 \%$ | $-10.7 \%$ |
| Yale | $-20.1 \%$ | $-18.9 \%$ | $-18.7 \%$ | $-16.7 \%$ | $-16.2 \%$ | $-14.7 \%$ | $-15.9 \%$ | $-11.1 \%$ | $-11.9 \%$ |
| Dartmouth | $-20.1 \%$ | $-23.1 \%$ | $-20.3 \%$ | $-16.3 \%$ | $-17.6 \%$ | $-19.7 \%$ | $-20.3 \%$ | $-21.0 \%$ | $-17.0 \%$ |
| Brown | $-26.7 \%$ | $-26.0 \%$ | $-24.7 \%$ | $-22.8 \%$ | $-23.5 \%$ | $-25.2 \%$ | $-25.2 \%$ | $-24.8 \%$ | $-25.2 \%$ |

Table 5-Adjusted
Percentage differences in mean ADJUSTED academic base salary of professors at selected research universities for
Academic Years 2011-2012 through 2019-2020
$\begin{array}{lllllllll}\text { 2011-12 2012-13 } & 2013-14 & 2014-15 & 2015-16 & 2016-17 & 2017-18 & 2018-19 & \text { 2019-20 }\end{array}$
Full Professors - Mean ADJUSTED Academic Base Salaries: Percentage Differences*

| Duke | $12.7 \%$ | $12.6 \%$ | $11.7 \%$ | $12.7 \%$ | $12.5 \%$ | $12.4 \%$ | $9.8 \%$ | $9.0 \%$ | $6.2 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Princeton | $1.7 \%$ | $2.0 \%$ | $2.2 \%$ | $4.2 \%$ | $4.8 \%$ | $4.5 \%$ | $6.4 \%$ | $7.7 \%$ | $4.4 \%$ |
| Columbia | $-5.0 \%$ | $-1.0 \%$ | $-1.1 \%$ | $0.1 \%$ | $3.0 \%$ | $3.2 \%$ | $0.7 \%$ | $3.3 \%$ | $2.1 \%$ |
| Penn | $\mathbf{\$ 1 5 8 . 5}$ | $\mathbf{\$ 1 6 3 . 2}$ | $\mathbf{\$ 1 6 9 . 1}$ | $\mathbf{\$ 1 7 3 . 7}$ | $\mathbf{\$ 1 7 8 . 2}$ | $\mathbf{\$ 1 8 4 . 0}$ | $\mathbf{\$ 1 9 2 . 5}$ | $\mathbf{\$ 1 9 8 . 1}$ | $\mathbf{\$ 2 1 0 . 2}$ |
| Yale | $0.0 \%$ | $0.3 \%$ | $-2.0 \%$ | $-1.6 \%$ | $-1.6 \%$ | $-1.8 \%$ | $-1.3 \%$ | $1.1 \%$ | $-1.6 \%$ |
| Harvard | $-5.9 \%$ | $-6.5 \%$ | $-8.1 \%$ | $-7.8 \%$ | $-7.3 \%$ | $-7.2 \%$ | $-3.9 \%$ | $-7.2 \%$ | $-9.1 \%$ |
| Chicago | $8.3 \%$ | $8.3 \%$ | $5.7 \%$ | $6.1 \%$ | $10.6 \%$ | $5.2 \%$ | $-9.7 \%$ | $-9.3 \%$ | $-13.1 \%$ |
| Brown | $-7.3 \%$ | $-7.7 \%$ | $-9.6 \%$ | $-10.0 \%$ | $-9.7 \%$ | $-9.8 \%$ | $-11.4 \%$ | $-11.8 \%$ | $-13.9 \%$ |
| MIT | $-18.5 \%$ | $-17.6 \%$ | $-17.5 \%$ | $-16.2 \%$ | $-14.7 \%$ | $-13.5 \%$ | $-12.9 \%$ | $-12.1 \%$ | $-15.1 \%$ |
| Cornell | $-1.2 \%$ | $-5.2 \%$ | $-7.2 \%$ | $-7.1 \%$ | $-6.5 \%$ | $-9.9 \%$ | $-13.5 \%$ | $-13.7 \%$ | $-16.6 \%$ |
| Stanford | $-21.1 \%$ | $-18.8 \%$ | $-19.1 \%$ | $-17.9 \%$ | $-18.1 \%$ | $-18.3 \%$ | $-21.4 \%$ | $-20.5 \%$ | $-23.4 \%$ |

NOTES: Excluded are all members of the faculty of PSOM (except basic scientists) and all clinician-educators. Data source: AAUP Salary Surveys.
*Universities are listed from highest to lowest percentage difference for full professors as of 2019-2020. For each year reported, the difference between the Penn mean salary and the mean salary for a comparison university was computed as a percentage of the Penn salary.

Salary figures adjusted using 2007, 2010, 2013, and 2017 Runzheimer Living Cost Indices. Indices for Hanover, NH (Dartmouth)are not available

|  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Associate Professors - Mean ADJUSTED Academic Base Salaries: Percentage Differences* |  |  |  |  |  |  |  |  |  |
| Duke | 13.5\% | 19.4\% | 16.5\% | 16.7\% | 11.8\% | 14.9\% | 12.7\% | 11.8\% | 13.2\% |
| Columbia | -7.5\% | -1.6\% | 7.3\% | 7.0\% | 5.9\% | 6.3\% | 0.2\% | 3.8\% | 5.0\% |
| Princeton | 0.1\% | 4.9\% | 3.3\% | 1.3\% | -0.5\% | -0.3\% | -0.2\% | -0.1\% | 2.8\% |
| Yale | -7.2\% | -2.9\% | -3.0\% | -8.2\% | -9.5\% | -4.9\% | -3.5\% | -6.6\% | 0.2\% |
| Penn | \$102.8 | \$102.4 | \$105.1 | \$110.1 | \$116.4 | \$118.7 | \$124.1 | \$127.5 | \$129.0 |
| Cornell | 6.4\% | 4.7\% | 4.4\% | 2.3\% | 1.1\% | -1.7\% | -5.5\% | -5.1\% | -3.8\% |
| MIT | -12.0\% | -10.0\% | -9.2\% | -8.7\% | -12.0\% | -9.4\% | -9.6\% | -7.4\% | -5.1\% |
| Brown | -9.4\% | -5.4\% | -5.0\% | -5.4\% | -8.6\% | -9.4\% | -10.2\% | -9.5\% | -9.0\% |
| Harvard | -11.6\% | -12.7\% | -11.6\% | -12.7\% | -16.8\% | -19.5\% | -8.1\% | -14.7\% | -12.0\% |
| Stanford | -18.4\% | -15.6\% | -15.2\% | -18.3\% | -21.0\% | -19.5\% | -21.8\% | -21.1\% | -20.1\% |
| Chicago | -3.7\% | -0.3\% | -4.1\% | -4.3\% | -3.7\% | -9.2\% | -24.7\% | -23.0\% | -21.6\% |


|  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assistant Professors - Mean ADJUSTED Academic Base Salaries: Percentage Differences* |  |  |  |  |  |  |  |  |  |
| Duke | -0.1\% | -2.2\% | 1.1\% | 1.5\% | 2.7\% | 3.0\% | -0.3\% | 4.7\% | 3.0\% |
| Penn | \$98.0 | \$101.4 | \$103.8 | \$105.2 | \$108.4 | \$112.1 | \$115.4 | \$117.4 | \$120.9 |
| Cornell | -4.2\% | -6.6\% | -9.8\% | -6.6\% | -0.8\% | -4.6\% | -5.8\% | -5.6\% | -6.0\% |
| Yale | -19.6\% | -18.3\% | -20.3\% | -18.3\% | -17.8\% | -16.4\% | -15.8\% | -11.0\% | -11.8\% |
| Princeton | -20.0\% | -20.6\% | -17.9\% | -16.6\% | -17.1\% | -17.8\% | -14.1\% | -13.2\% | -12.9\% |
| Columbia | -23.2\% | -20.6\% | -17.1\% | -15.8\% | -13.0\% | -15.0\% | -15.7\% | -14.5\% | -13.5\% |
| MIT | -21.1\% | -21.2\% | -19.8\% | -18.5\% | -19.5\% | -19.3\% | -18.8\% | -15.3\% | -13.6\% |
| Harvard | -15.7\% | -15.9\% | -17.2\% | -19.2\% | -16.8\% | -17.2\% | -8.2\% | -13.7\% | -13.7\% |
| Chicago | -9.1\% | -12.1\% | -13.7\% | -9.4\% | -9.4\% | -10.5\% | -21.9\% | -18.7\% | -17.0\% |
| Brown | -21.3\% | -20.5\% | -20.5\% | -18.6\% | -19.3\% | -21.1\% | -21.7\% | -21.2\% | -21.7\% |
| Stanford | -28.4\% | -29.8\% | -28.0\% | -26.0\% | -26.2\% | -27.3\% | -29.9\% | -28.2\% | -29.4\% |

Table 6
FULL PROFESSORS: Median academic base salary percentage increases of faculty continuing in rank who were Penn FULL PROFESSORS for FY2020, along with the first and third quartile salary increases

|  | $\begin{array}{l}\text { First Quartile (Q1), Median (Md.), and Third Quartile (Q3) } \\ \text { Percentage Salary } \\ \text { (Q1) } \\ \text { (Mdreases, } \\ \text { (MY 2019-2020 }\end{array}$ |  |
| :--- | :--- | :--- | :--- |
| (Q3) |  |  |$]$

NOTES: The Budget Guideline is provided for comparison purposes. As per Penn policy, it is a guideline for the salary increment pool for all standing faculty members in each school, but not specifically for each rank.

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

Salary increases include increases from all sources (e.g. merit, market, retention).
The median (Md.) percentage salary increase is the mid-point of all increases within each school and rank.
The difference between the third (Q3) and first quartile (Q1) provides a measure of variability in the percentage increases for each school and rank.

Median percentage increases are reported only if the number of faculty members in a given school and rank is five or more, quartile percentage increases are reported only if the number of faculty members is nine or more.

Table 7
ASSOCIATE PROFESSORS: Median academic base salary percentage increases of faculty continuing in rank who were Penn ASSOCIATE PROFESSORS for FY2020, along with the first and third quartile salary increases

| School/Area | First Quartile (Q1), Median (Md.), and Third Quartile (Q3) Percentage Salary Increases, FY 2019-2020 |  |  |
| :---: | :---: | :---: | :---: |
| All Schools | 2.8\% | 3.0\% | 3.5\% |
| Annenberg |  |  |  |
| Dental Medicine |  |  |  |
| Engineering \& Applied Science | 3.8\% | 4.9\% | 6.0\% |
| Graduate Education | 2.0\% | 3.0\% | 3.8\% |
| Humanities (A\&S) | 2.8\% | 2.8\% | 3.2\% |
| Law |  |  |  |
| Natural Science (A\&S) | 2.5\% | 2.8\% | 3.0\% |
| Nursing | 3.0\% | 3.0\% | 3.0\% |
| Perelman-Basic Science | 2.0\% | 3.0\% | 3.3\% |
| Social Policy \& Practice |  | 3.5\% |  |
| Social Science (A\&S) | 2.8\% | 3.0\% | 4.5\% |
| Veterinary Medicine | 3.0\% | 3.0\% | 3.5\% |
| Weitzman | 3.0\% | 3.0\% | 3.3\% |
| Wharton | 3.0\% | 3.2\% | 4.0\% |
| Budget Guidelines |  | 3.0\% |  |

NOTES: The Budget Guideline is provided for comparison purposes. As per Penn policy, it is a guideline for the salary increment pool for all standing faculty members in each school, but not specifically for each rank.

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

Salary increases include increases from all sources (e.g. merit, market, retention).
The median (Md.) percentage salary increase is the mid-point of all increases within each school and rank.
The difference between the third (Q3) and first quartile (Q1) provides a measure of variability in the percentage increases for each school and rank.

Median percentage increases are reported only if the number of faculty members in a given school and rank is five or more, quartile percentage increases are reported only if the number of faculty members is nine or more.

Table 8
ASSISTANT PROFESSORS: Median academic base salary percentage increases of faculty continuing in rank who were Penn ASSISTANT PROFESSORS for FY2020, along with the first and third quartile salary increases

| School/Area | First Quartile (Q1), Median (Md.), and Third Quartile (Q3) <br> Percentage Salary Increases, FY 2019-2020 |  |  |
| :--- | :--- | :--- | :--- |
|  | Q1 | Md. | Q3 |
| All Schools | $3.0 \%$ | $3.0 \%$ | $3.5 \%$ |

Annenberg
Dental Medicine

| Engineering \& Applied Science | $3.2 \%$ | $4.0 \%$ | $4.5 \%$ |
| :--- | :--- | :--- | :--- |
| Graduate Education |  | $3.5 \%$ |  |
| Humanities (A\&S) | $2.8 \%$ | $3.0 \%$ | $4.5 \%$ |
| Law | $2.8 \%$ | $3.0 \%$ | $3.2 \%$ |
| Natural Science (A\&S) | $3.0 \%$ | $3.0 \%$ | $3.0 \%$ |
| Nursing | $3.0 \%$ | $3.0 \%$ | $3.5 \%$ |
| Perelman-Basic Science | $2.8 \%$ | $3.0 \%$ |  |
| Social Policy \& Practice | $3.0 \%$ | $3.0 \%$ | $3.2 \%$ |
| Social Science (A\&S) |  | $3.0 \%$ | $3.0 \%$ |
| Veterinary Medicine | $2.9 \%$ | $3.0 \%$ |  |
| Weitzman |  | $3.0 \%$ | $3.4 \%$ |
| Wharton |  |  |  |
| Budget Guidelines |  |  |  |

NOTES: The Budget Guideline is provided for comparison purposes. As per Penn policy, it is a guideline for the salary increment pool for all standing faculty members in each School, but not specifically for each rank.

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

Salary increases include increases from all sources (e.g. merit, market, retention).
The median (Md.) percentage salary increase is the mid-point of all increases within each school and rank.
The difference between the third (Q3) and first quartile (Q1) provides a measure of variability in the percentage increases for each school and rank.

Median percentage increases are reported only if the number of faculty members in a given school and rank is five or more, quartile percentage increases are reported only if the number of faculty members is nine or more.

Table 9
Mean academic base salary of Penn standing faculty members who continued in rank by rank

| Rank/Academic Year/Metric |  | Amount | Not Weighted | Weighted |
| :---: | :---: | :---: | :---: | :---: |
|  | Mean | \$207,384 | 1.71 | 1.84 |
|  | Median | \$187,571 | 1.88 | 1.84 |
|  | Mean | \$213,373 | 1.72 | 1.84 |
|  | Median | \$193,812 | 1.93 | 1.85 |
|  | Mean | \$221,028 | 1.74 | 1.85 |
|  | Median | \$200,460 | 1.92 | 1.85 |
|  | Mean | \$227,354 | 1.72 | 1.87 |
|  | Median | \$205,320 | 1.86 | 1.87 |
|  | Mean | \$234,677 | 1.76 | 1.89 |
|  | Median | \$211,391 | 1.93 | 1.88 |
| Associate Professor 2015-2016 | Mean | \$130,872 | 1.08 | 1.25 |
|  | Median | \$113,300 | 1.14 | 1.26 |
| 2016-2017 | Mean | \$135,314 | 1.09 | 1.24 |
|  | Median | \$115,816 | 1.16 | 1.27 |
| 2017-2018 | Mean | \$137,758 | 1.09 | 1.24 |
|  | Median | \$119,710 | 1.15 | 1.25 |
| 2018-2019 | Mean | \$141,883 | 1.07 | 1.25 |
|  | Median | \$124,309 | 1.13 | 1.25 |
| 2019-2020 | Mean | \$143,868 | 1.08 | 1.25 |
|  | Median | \$126,834 | 1.16 | 1.23 |
| Assistant Professor 2015-2016 | Mean | \$121,532 | 1.00 | 1.00 |
|  | Median | \$99,535 | 1.00 | 1.00 |
| 2016-2017 | Mean | \$123,929 | 1.00 | 1.00 |
|  | Median | \$100,255 | 1.00 | 1.00 |
| 2017-2018 | Mean | \$126,802 | 1.00 | 1.00 |
|  | Median | \$104,498 | 1.00 | 1.00 |
| 2018-2019 | Mean | \$132,272 | 1.00 | 1.00 |
|  | Median | \$110,123 | 1.00 | 1.00 |
| 2019-2020 | Mean | \$133,263 | 1.00 | 1.00 |
|  | Median | \$109,366 | 1.00 | 1.00 |

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

The data are weighted by the number of continuing faculty members at each rank in each school.

Table 10
Variability of academic base salary for faculty who continued in rank: first, second and third quartile median salary by rank and year

| Rank/Academic Year | Q1 | Median | Q3 | IQR | IQR-toMedian Ratio | \# of Areas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Professor |  |  |  |  |  |  |
| 2015-2016 | \$152,200 | \$187,571 | \$249,474 | \$97,274 | 0.52 | 14 |
| 2016-2017 | \$154,752 | \$193,812 | \$257,845 | \$102,094 | 0.53 | 14 |
| 2017-2018 | \$160,557 | \$200,460 | \$268,324 | \$107,767 | 0.54 | 14 |
| 2018-2019 | \$165,139 | \$205,320 | \$273,202 | \$108,063 | 0.53 | 14 |
| 2019-2020 | \$170,095 | \$211,391 | \$282,628 | \$112,533 | 0.53 | 14 |
| Associate Professor |  |  |  |  |  |  |
| 2015-2016 | \$101,414 | \$113,300 | \$134,386 | \$32,972 | 0.29 | 14 |
| 2016-2017 | \$105,210 | \$115,816 | \$138,339 | \$33,129 | 0.29 | 13 |
| 2017-2018 | \$108,932 | \$119,710 | \$140,858 | \$31,926 | 0.27 | 13 |
| 2018-2019 | \$111,554 | \$124,309 | \$145,655 | \$34,101 | 0.27 | 13 |
| 2019-2020 | \$114,350 | \$126,834 | \$149,867 | \$35,517 | 0.28 | 13 |
| Assistant Professor |  |  |  |  |  |  |
| 2015-2016 | \$86,801 | \$99,535 | \$165,000 | \$78,199 | 0.78 | 13 |
| 2016-2017 | \$89,746 | \$100,255 | \$164,250 | \$74,504 | 0.74 | 13 |
| 2017-2018 | \$92,739 | \$104,498 | \$162,500 | \$69,761 | 0.67 | 13 |
| 2018-2019 | \$95,383 | \$110,123 | \$170,500 | \$75,118 | 0.68 | 13 |
| 2019-2020 | \$97,695 | \$109,366 | \$170,000 | \$72,305 | 0.66 | 14 |

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

Table 11
Percentage Salary Increase Distribution of Faculty Who Continued in Rank by Sex and Rank

| Rank/Sex |  | First Quartile (Q1), Median (Md.), and Third Quartile (Q3) Percentage Salary Increases, FY 2019-2020 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Professor |  | Q1 | Md. | Q3 |
|  | Men | 2.8\% | 3.0\% | 3.5\% |
|  | Women | 3.0\% | 3.0\% | 3.8\% |
| Associate Professor | Men | 2.8\% | 3.0\% | 3.5\% |
|  | Women | 2.8\% | 3.0\% | 3.8\% |
| Assistant Professor | Men | 2.9\% | 3.0\% | 3.4\% |
|  | Women | 3.0\% | 3.0\% | 4.0\% |

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

Table 12
Mean academic base salary of Penn standing faculty members who continued in rank by rank and sex.

| Rank/Academic Year /Metric |  | Unweighted |  | Weighted by School/Discipline |  |  |  | Men - Women |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Women | Men | $\%$ <br> Differen | Women | Men | $\%$ <br> Difference | Unweighted | Weighted |
| Professor |  |  |  |  |  |  |  |  |  |
| 2015-2016 | Median | \$181,442 | \$190,000 | 4.7\% | \$203,478 | \$205,589 | 1.0\% |  |  |
| 2016-2017 | Mean | \$202,077 | \$216,822 | 7.3\% | \$211,327 | \$216,822 | 3.1\% | \$14,745 | \$6,518 |
|  | Median | \$184,871 | \$195,432 | 5.7\% | \$208,079 | \$211,620 | 1.7\% |  |  |
| 2017-2018 | Mean | \$209,332 | \$224,612 | 7.3\% | \$221,277 | \$224,612 | 2.1\% | \$15,280 | \$4,725 |
|  | Median | \$191,455 | \$202,303 | 5.7\% | \$214,980 | \$218,668 | 1.7\% |  |  |
| 2018-2019 | Mean | \$215,827 | \$231,146 | 7.1\% | \$229,001 | \$231,146 | 1.5\% | \$15,319 | \$3,481 |
|  | Median | \$197,760 | \$207,566 | 5.0\% | \$224,511 | \$226,504 | 0.9\% |  |  |
| 2019-2020 | Mean | \$223,123 | \$238,614 | 6.9\% | \$236,874 | \$238,614 | 0.7\% | \$15,491 | \$1,740 |
|  | Median | \$205,308 | \$214,505 | 4.5\% | \$233,038 | \$233,411 | 0.2\% |  |  |
| Associate Professor |  |  |  |  |  |  |  |  |  |
| 2015-2016 | Mean | \$117,024 | \$139,565 | 19.3\% | \$127,591 | \$139,565 | 9.4\% | \$22,541 | \$11,974 |
|  | Median | \$107,193 | \$123,075 | 14.8\% | \$129,967 | \$136,475 | 5.0\% |  |  |
| 2016-2017 | Mean | \$125,640 | \$141,234 | 12.4\% | \$138,505 | \$141,234 | 2.0\% | \$15,594 | \$2,729 |
|  | Median | \$112,232 | \$123,247 | 9.8\% | \$140,304 | \$137,831 | -1.8\% |  |  |
| 2017-2018 | Mean | \$132,170 | \$141,178 | 6.8\% | \$141,845 | \$141,178 | -0.5\% | \$9,008 | -\$667 |
|  | Median | \$117,815 | \$124,877 | 6.0\% | \$141,123 | \$139,411 | -1.2\% |  |  |
| 2018-2019 | Mean | \$136,518 | \$145,392 | 6.5\% | \$147,469 | \$145,392 | -1.3\% | \$8,874 | -\$1,892 |
|  | Median | \$122,250 | \$127,062 | 3.9\% | \$145,881 | \$143,502 | -1.5\% |  |  |
| 2019-2020 | Mean | \$134,632 | \$149,245 | 10.9\% | \$144,834 | \$149,245 | 3.0\% | \$14,613 | \$4,411 |
|  | Median | \$124,795 | \$130,139 | 4.3\% | \$141,486 | \$144,844 | 2.4\% |  |  |
| Assistant Professor |  |  |  |  |  |  |  |  |  |
| 2015-2016 | Mean | \$113,120 | \$127,485 | 12.7\% | \$123,750 | \$127,485 | 3.0\% | \$14,365 | \$3,735 |
|  | Median | \$95,209 | \$106,003 | 11.3\% | \$120,728 | \$124,213 | 2.9\% |  |  |
| 2016-2017 | Mean | \$114,342 | \$131,006 | 14.6\% | \$127,957 | \$131,006 | 2.4\% | \$16,664 | \$3,1049 |
|  | Median | \$96,914 | \$108,265 | 11.7\% | \$123,935 | \$126,603 | 2.2\% |  |  |
| 2017-2018 | Mean | \$117,892 | \$134,178 | 13.8\% | \$134,366 | \$134,178 | -0.1\% | \$16,286 | -\$188 |
|  | Median | \$100,131 | \$112,231 | 12.1\% | \$129,538 | \$130,074 | 0.4\% |  |  |
| 2018-2019 | Mean | \$122,891 | \$140,914 | 14.7\% | \$138,599 | \$140,914 | 1.7\% | \$18,023 | \$2,315 |
|  | Median | \$103,186 | \$115,951 | 12.4\% | \$135,424 | \$136,582 | 0.9\% |  |  |
| 2019-2020 | Mean | \$126,569 | \$139,702 | 10.4\% | \$138,456 | \$139,702 | 0.9\% | \$13,133 | \$1,246 |
|  | Median | \$103,629 | \$116,190 | 12.1\% | \$135,634 | \$135,234 | -0.3\% |  |  |

NOTES: All salaries are converted to a nine-month base. Academic base salary increases pertain to all Penn standing faculty members with an appointment at the time of the fall census for both years. Faculty members on paid leave or unpaid leave are reported at their full salaries.

Excluded are all members of the Faculty of PSOM (except basic scientists); all clinician-educators in Dental Medicine, Veterinary Medicine, Nursing, and Social Policy \& Practice; faculty members on phased retirement plans; and the 12 Deans.

Salaries for female faculty members are weighted using male weights. Male weights are calculated as a ratio of male faculty in each school/ area to the total number of male faculty at Penn. Percent difference is calculated as the difference between male and female salaries divided by the female salary. Negative percent differences indicate that salaries of female faculty exceed those of male faculty.

