Founded in 1900, the Association of American Universities is composed of America’s leading research universities. AAU’s 65 research universities transform lives through education, research, and innovation. Our member universities earn the majority of competitively awarded federal funding for research that improves public health, seeks to address national challenges, and contributes significantly to our economic strength, while educating and training tomorrow’s visionary leaders and innovators.

**ECONOMIC IMPACT**

- 4,826 Patents in 2018
- 5,134 Technology license agreements in 2018
- 4,039 Total operational startups in 2018
- 64 Current Fortune 100 CEOs*

**EDUCATION 2017 Data**

- AAU universities make up only 2% of all 4-year universities in the U.S., yet award nearly 43% of all research doctorate degrees.***
- 98% Non-AAU member universities
- 2% AAU member universities
- 57% Research doctorates awarded to non-AAU member universities
- 43% Research doctorates awarded by AAU member universities
- 98% Non-AAU member universities
- 2% AAU member universities
- 57% Research doctorates awarded to non-AAU member universities
- 43% Research doctorates awarded by AAU member universities
- 98% Non-AAU member universities
- 2% AAU member universities
- 57% Research doctorates awarded to non-AAU member universities
- 43% Research doctorates awarded by AAU member universities

**VALUE**

- 83% of students graduate within 6 years**
- 57% AAU students who graduate debt-free

**RESEARCH**

- $25.6 BILLION Federal research dollars awarded in 2018

---

*CEOs who attended an AAU university as of 2019.
**2018 graduation rate at AAU universities.
***Not including professional doctoral degrees.
Founded in 1900, the Association of American Universities is composed of America’s leading research universities. AAU’s 65 research universities transform lives through education, research, and innovation. Our member universities earn the majority of competitively awarded federal funding for research that improves public health, seeks to address national challenges, and contributes significantly to our economic strength, while educating and training tomorrow’s visionary leaders and innovators.

**EDUCATION 2017 Data**

AAU universities make up only 2% of all 4-year universities in the U.S., yet award nearly 43% of all research doctorate degrees.***

98% Non-AAU member universities

57% Research doctorates awarded by non-AAU member universities

43% Research doctorates awarded by AAU member universities

% Degrees awarded by AAU universities

50% of all doctoral degrees in STEM and Social Sciences

18% of all undergrad degrees in STEM and Social Sciences

53% of all doctoral degrees in Arts, Humanities, and Music

14% of all undergrad degrees in Arts, Humanities, and Music

**ECONOMIC IMPACT**

- 4,826 Patents in 2018
- 5,134 Technology license agreements in 2018
- 4,039 Total operational startups in 2018
- 64 Current Fortune 100 CEOs*

**VALUE**

- 83% of students graduate within 6 years**
- 57% AAU students who graduate debt-free

**RESEARCH**

Federal research dollars awarded in 2018

$25.6B
780,060
Total employees
at AAU universities in 2018

$82.4 Billion
Total salaries
paid by AAU universities
in 2018

25 in Top 10
25 AAU universities were among the top 10 employers in their state as of 2018

41 in Top 50
41 AAU universities were in the top 50 for producing venture capital backed entrepreneurs as of 2019
Total employees at AAU universities in 2018: 780,060

Total salaries paid by AAU universities in 2018: $82.4 Billion

25 AAU universities were among the top 10 employers in their state as of 2018.

41 AAU universities were in the top 50 for producing venture capital backed entrepreneurs as of 2019.

Patents issued in 2018: 4,826

Technology license agreements in 2018: 5,134

Cumulative operational startup companies formed as of 2018: 4,039

Startup companies formed in 2018: 663

Startup companies created in home state in 2018: 427
In 2017, AAU institutions awarded 50% of all research doctoral degrees and 18% of all undergraduate degrees in STEM and Social Sciences.

**DEGREES AWARDED BY AAU UNIVERSITIES IN THE U.S. AS OF 2018**

- Total Degrees: 531,026
- Research Doctorates: 31,132
- Professional Practice or Other Doctorates: 25,288
- Master’s Degrees: 166,155
- Bachelor’s Degrees: 307,831

**RESEARCH DOCTORAL DEGREES** in STEM out of National Total (2017)

- 59% Physical Sciences
- 58% Engineering
- 46% Life Sciences
- 39% Psychology & Social Sciences
- 54% Math & Computer Sciences

**BACHELOR DEGREES** in STEM out of National Total (2017)

- 25% Physical Sciences
- 21% Psychology & Social Sciences
- 21% Engineering
- 9% Math and Computer Sciences
- 14% Life Sciences

**STUDENTS AT AAU UNIVERSITIES IN 2018**

- 1.3 million Undergraduates
  - 12% of all Undergraduates
- 641,073 Graduate Students
  - 21% of all Graduate Students
- 44,295 Total Postdocs
  - 68% of all Postdocs
- 388,485 International Students
  - 36% of all International Students
- 93,199 Study Abroad Students
  - 28% of all Study Abroad Students

**GRADUATES OF AAU UNIVERSITIES**

- 24 Governors in 2019
- 268 Members of Congress in 2019
- 5 Joint Chiefs of Staff in 2019
- 13 U.S. Presidents 1900–2019
- 9 All 9 current U.S. Supreme Court Justices
- 45 Supreme Court Justices 1900–2019
- 64 Fortune 100 CEOs in 2019
- 8,890 Teachers in 2018
- 6,667 Medical Degrees in 2019
- 2,497 Dental Degrees in 2018
- 9,382 Nursing Degrees in 2018

*For all 4-year U.S. institutions. **Number of Postdocs in 2017.
**DEGREES AWARDED BY AAU UNIVERSITIES IN THE U.S. AS OF 2018**

- **Total Degrees**: 531,026
- **Research Doctorates**: 31,132
- **Professional Practice or Other Doctorates**: 25,288
- **Master’s Degrees**: 166,155
- **Bachelor’s Degrees**: 307,831

**GRADUATES OF AAU UNIVERSITIES**

- **Governors in 2019**: 24
- **Members of Congress in 2019**: 268
- **Joint Chiefs of Staff in 2019**: 5
- **U.S. Presidents 1900–2019**: 13
- **All 9 current U.S. Supreme Court Justices**: 9
- **Supreme Court Justices 1900–2019**: 45
- **Fortune 100 CEOs in 2019**: 64
- **Teachers in 2018**: 8,890
- **Medical Degrees in 2019**: 6,667
- **Dental Degrees in 2018**: 2,497
- **Nursing Degrees in 2018**: 9,382

**In 2017, AAU institutions awarded 50% of all research doctoral degrees and 18% of all undergraduate degrees in STEM and Social Sciences**

**RESEARCH DOCTORAL DEGREES** in STEM out of National Total (2017)

- **59% Physical Sciences**
- **58% Engineering**
- **54% Math & Computer Sciences**
- **46% Life Sciences**
- **39% Psychology & Social Sciences**

**BACHELOR DEGREES** in STEM out of National Total (2017)

- **30% Engineering**
- **25% Physical Sciences**
- **21% Psychology & Social Sciences**
- **14% Life Sciences**
- **9% Math and Computer Sciences**

**STUDENTS AT AAU UNIVERSITIES IN 2018**

- **12% of all Undergraduates***: 1.3 million
- **21% of all Graduate Students***: 641,073
- **68% of all Postdocs**: 44,295
- **36% of all International Students**: 388,485
- **28% of all Study Abroad Students**: 93,199

*For all U.S. 4-year institutions. **Number of Postdocs in 2017.
RESEARCH

FEDERALLY FUNDED ACADEMIC RESEARCH AND DEVELOPMENT IN 2018*

<table>
<thead>
<tr>
<th>Department of Agriculture</th>
<th>Department of Defense</th>
<th>Department of Energy</th>
<th>Department of Health and Human Services (including NIH)</th>
<th>National Aeronautics and Space Administration</th>
<th>National Science Foundation</th>
<th>Other Federal Departments and Agencies</th>
<th>Total federal R&amp;D at AAU universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$3.1 Billion</td>
<td>$1.6 Billion</td>
<td>$25.6 Billion</td>
</tr>
<tr>
<td>$20B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$15B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$10B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$5B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*% of total amount awarded to AAU universities / total dollar amount received by AAU universities

HONORS & AWARDS

54% of all National Academy Members

3,836 Members of the National Academies at AAU universities

70% of all American Academy of Arts and Sciences Fellows

3,486 Elected American Academy of Arts and Sciences Fellows affiliated with AAU universities

89% of all National Academy of Inventors

56 National Academy of Inventors Member Institutions

54% of all National Academy Members

3,836 Members of the National Academies at AAU universities

70% of all American Academy of Arts and Sciences Fellows

3,486 Elected American Academy of Arts and Sciences Fellows affiliated with AAU universities

89% of all National Academy of Inventors

56 National Academy of Inventors Member Institutions

NOBEL PRIZE

38% of all winners are at AAU universities

38% of all National Academy Members

3,836 Members of the National Academies at AAU universities

70% of all American Academy of Arts and Sciences Fellows

3,486 Elected American Academy of Arts and Sciences Fellows affiliated with AAU universities

89% of all National Academy of Inventors

56 National Academy of Inventors Member Institutions

NATIONAL MEDAL OF TECHNOLOGY & INNOVATION

78% of all winners are at AAU universities

78% of recipients are at AAU universities (of university winners)

78% of all National Academy Members

3,836 Members of the National Academies at AAU universities

70% of all American Academy of Arts and Sciences Fellows

3,486 Elected American Academy of Arts and Sciences Fellows affiliated with AAU universities

89% of all National Academy of Inventors

56 National Academy of Inventors Member Institutions

NATIONAL MEDAL OF SCIENCE

73% of all winners are at AAU universities

73% of all National Academy Members

3,836 Members of the National Academies at AAU universities

70% of all American Academy of Arts and Sciences Fellows

3,486 Elected American Academy of Arts and Sciences Fellows affiliated with AAU universities

89% of all National Academy of Inventors

56 National Academy of Inventors Member Institutions

SCHOLARLY OUTPUT

21.4 Million

Citations (2014-2018)*

2.4 Million

Publications (2014-2018)*

60,945

Books (2009-2018)**

RESOURCES

22 research parks

65 startup and early stage technology investment programs

73 university accelerator programs

$10.8 B in institutional contributions to research and development

*Thomson-Reuters, InCites
**2018 Academic Analytics

Association of American Universities | 1200 New York Ave, Washington, DC | aau.edu | @AAUniversities | 
## FEDERALLY FUNDED ACADEMIC RESEARCH AND DEVELOPMENT IN 2018*

<table>
<thead>
<tr>
<th>Department</th>
<th>Total Federal R&amp;D at AAU universities</th>
<th>% of Total Amount Awarded to AAU Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Agriculture</td>
<td>$25B</td>
<td>66%</td>
</tr>
<tr>
<td>Department of Defense</td>
<td>$20B</td>
<td>59%</td>
</tr>
<tr>
<td>Department of Energy</td>
<td>$15B</td>
<td>61%</td>
</tr>
<tr>
<td>Department of Health and Human Services (including NIH)</td>
<td>$10B</td>
<td>62%</td>
</tr>
<tr>
<td>National Aeronautics and Space Administration</td>
<td>$5B</td>
<td>63%</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td></td>
<td>66%</td>
</tr>
<tr>
<td>Other Federal Departments and Agencies</td>
<td></td>
<td>66%</td>
</tr>
<tr>
<td>Total Federal R&amp;D at AAU universities</td>
<td>$25B</td>
<td>63%</td>
</tr>
</tbody>
</table>

*% of total amount awarded to AAU universities / total dollar amount received by AAU universities

## SCHOLARLY OUTPUT

- **21.4 Million**
  - Citations (2014-2018)*
- **2.4 Million**
  - Publications (2014-2018)*
- **60,945**
  - Books (2009-2018)**

*Thomson-Reuters InCites  **2018 Academic Analytics

## RESOURCES

- **22**
  - Research parks
- **65**
  - Startup and early stage technology investment programs
- **73**
  - University accelerator programs
- **$10.8 B**
  - In institutional contributions to research and development

## SCHOLARLY OUTPUT

- 60,945 Books (2009-2018)**

## Honors & Awards

- **54%**
  - 3,836 Members of the National Academies at AAU universities
- **70%**
  - 3,486 Elected American Academy of Arts and Sciences Fellows affiliated with AAU universities
- **89%**
  - 56 National Academy of Inventors Member Institutions

## Nobel Prize

- **38%**
  - 38% of all winners are at AAU universities

## National Medal of Technology & Innovation

- **78%**
  - 78% of recipients are at AAU universities (of university winners)

## National Medal of Science

- **73%**
  - 73% of all awardees are affiliated with an AAU university

---

Association of American Universities | 1200 New York Ave, Washington, DC | aau.edu | @AAUniversities |
### Student Debt

In 2018, only 4 out of 10 graduating seniors from AAU universities had debt, while 7 out of 10 graduating seniors from non-AAU universities had debt.

### Student Debt Default Rates

- **AAU Universities**: 2.8%
- **Non-Profit Universities**: 6.9%
- **For-Profit Universities**: 14.3%

### 2018 AAU Graduation Rate

- 4 out of 10 AAU seniors with debt
- 7 out of 10 Non-AAU seniors with debt

### 2018 National Graduation Rate

- 51% in 6 years for Pell Grant Recipients
- 59% in 5 years
- 63% in 4 years

### Institutional Student Grant Aid in 2018

<table>
<thead>
<tr>
<th>Institution Type</th>
<th>Type of Aid</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional Grants</strong></td>
<td>Institutional Grants</td>
<td>$1.51 Billion</td>
<td>$1.59 Billion</td>
<td>$1.67 Billion</td>
<td>$1.77 Billion</td>
<td>$1.86 Billion</td>
<td>$1.99 Billion</td>
</tr>
<tr>
<td><strong>Federal Loans</strong></td>
<td>Federal Loans</td>
<td>$515.02 Million</td>
<td>$520.91 Million</td>
<td>$501.71 Million</td>
<td>$473.67 Million</td>
<td>$480.62 Million</td>
<td>$462.06 Million</td>
</tr>
<tr>
<td><strong>Federal Grants</strong></td>
<td>Federal Grants</td>
<td>$260.69 Million</td>
<td>$265.31 Million</td>
<td>$269.80 Million</td>
<td>$268.26 Million</td>
<td>$269.87 Million</td>
<td>$290.44 Million</td>
</tr>
</tbody>
</table>

In 2018, Institutional Grant Aid made up 73% of an AAU student's total financial aid.
INSTITUTIONAL STUDENT GRANT AID IN 2018

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Loans</td>
<td>$515.02M</td>
<td>$502.91M</td>
<td>$501.71M</td>
<td>$473.67M</td>
<td>$480.62M</td>
<td>$462.06M</td>
</tr>
<tr>
<td>Federal Grants</td>
<td>$260.69M</td>
<td>$265.31M</td>
<td>$269.80M</td>
<td>$268.26M</td>
<td>$269.87M</td>
<td>$290.44M</td>
</tr>
</tbody>
</table>

2018 AAU GRADUATION RATE
- 65% in 4 years
- 81% in 5 years
- 83% in 6 years

2018 NATIONAL GRADUATION RATE
- 77% in 4 years
- 59% in 5 years
- 63% in 6 years

STUDENT DEBT

- Only 4 out of 10 AAU seniors with debt
- 7 out of 10 non-AAU seniors with debt

STUDENT DEBT DEFAULT RATES
- 2.8% AAU Universities
- 6.9% Non-PROFIT Universities
- 14.3% FOR-PROFIT Universities

In 2018, Institutional Grant Aid made up 73% of an AAU student’s total financial aid.

$515.02 Million
$502.91 Million
$501.71 Million
$473.67 Million
$480.62 Million
$462.06 Million

$260.69 Million
$265.31 Million
$269.80 Million
$268.26 Million
$269.87 Million
$290.44 Million