

AAU Institutions

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Introduction

- In 2019, the Association of American Universities (AAU) admitted three new institutions to their ranks:
 - Dartmouth College
 - University of California - Santa Cruz
 - The University of Utah

How are institutions selected as AAU members?

Membership Indicators

- Phase 1
 - Competitively funded federal support
 - Membership in National Academies
 - Faculty awards, fellowships, memberships
 - Citations
- Phase 2
 - United States Department of Agriculture (USDA), state, local, and industry research funding
 - Number of research/scholarship doctoral degrees awarded
 - Number of science & engineering postdoctoral appointees
 - Undergraduate education

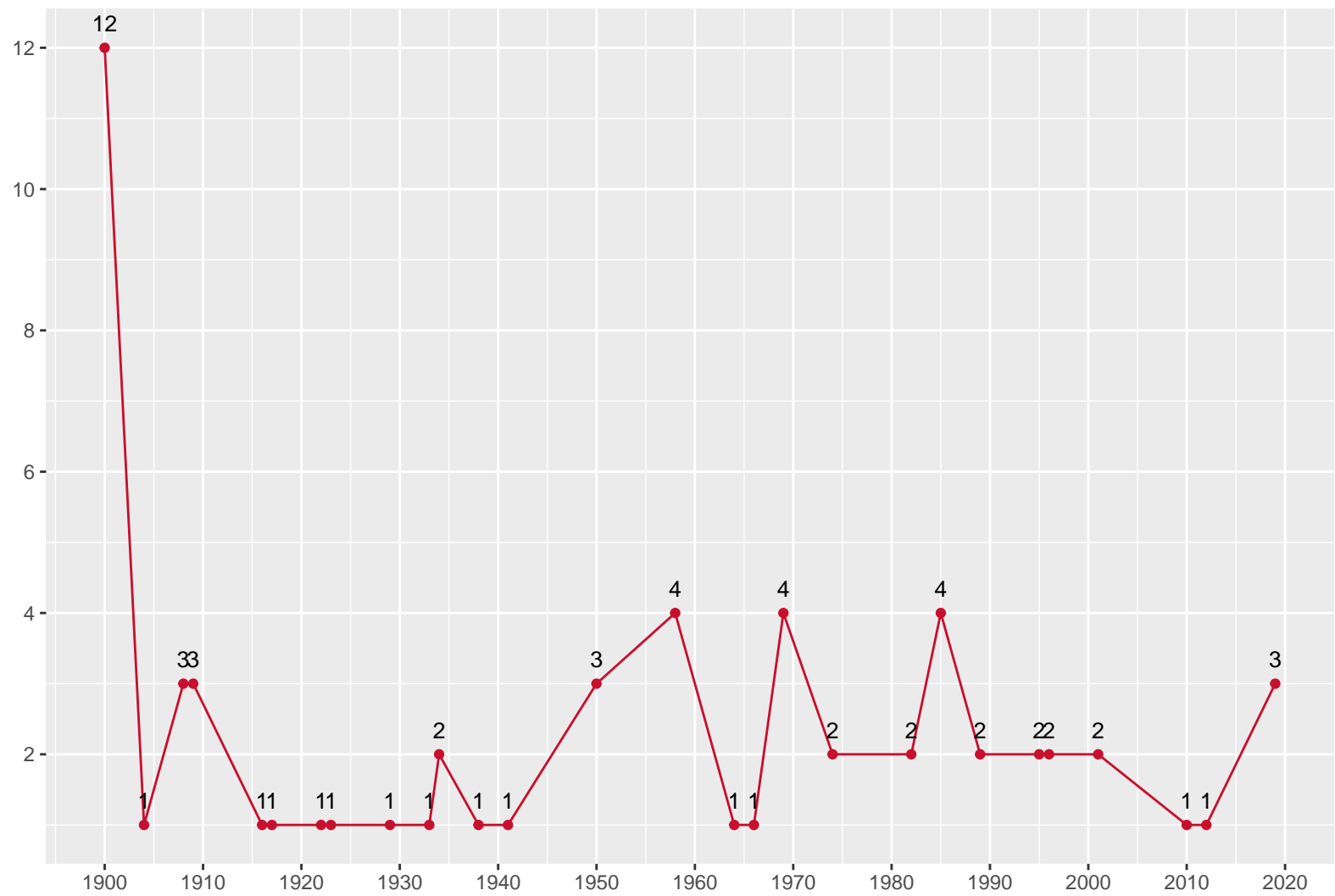
Data Sources

- National Science Foundation (NSF) Higher Education Research and Development Survey
- National Academies' membership database
- Thomson Reuters InCites citations database
- Department of Education IPEDS (Integrated Postsecondary Education Data System) data
- NSF Survey of Graduate Students and Postdoctorates in Science and Engineering
- U.S. News & World Report Academic Insights

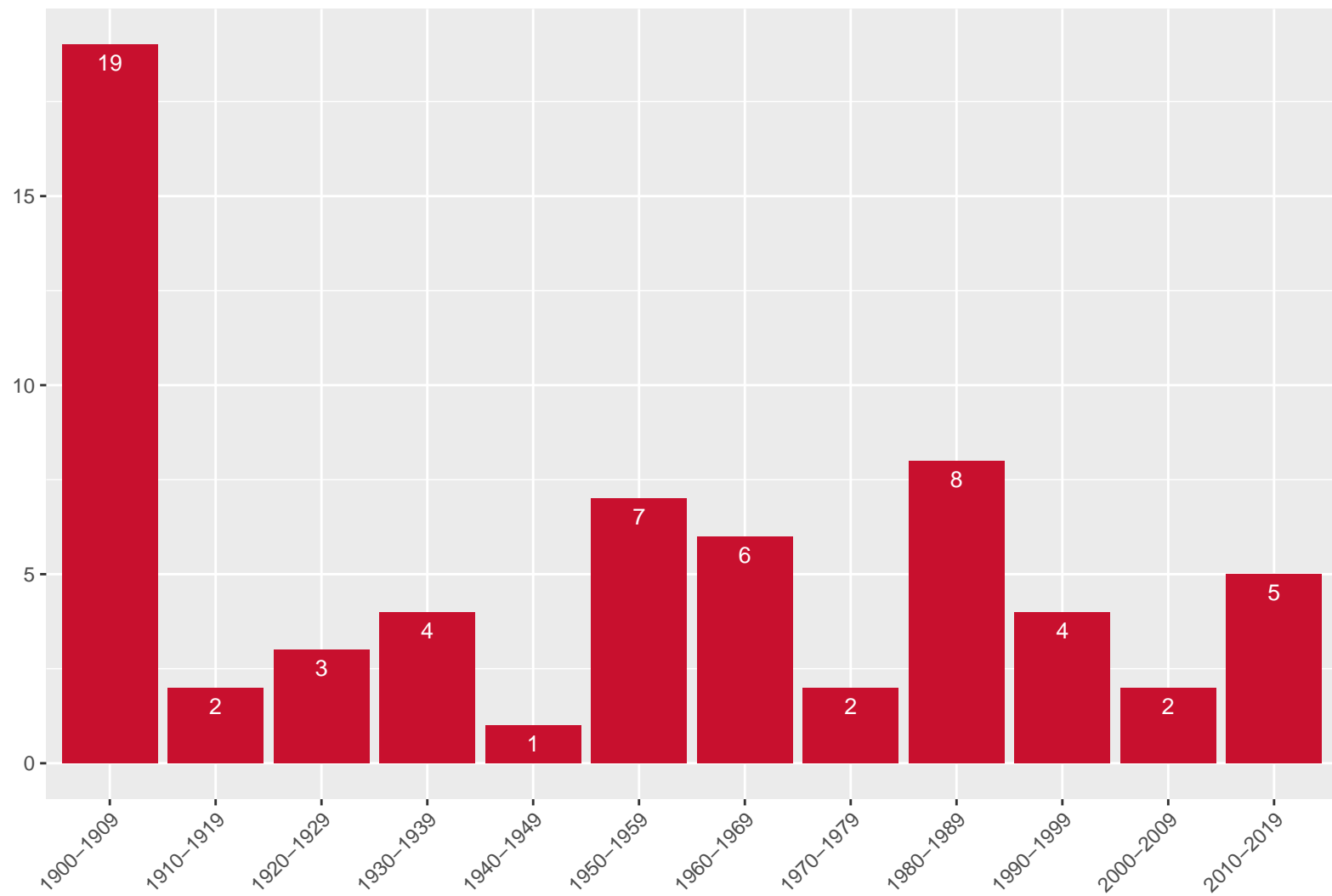
Institution Summary

- 130 Very High Research, Tier 1 Universities
- 93 Public / 37 Private
- 63 AAU Members / 67 Non-Members
- Public: 39% AAU Members
- Private: 73% AAU Members

AAU Members Admitted by Year, 1900–2019

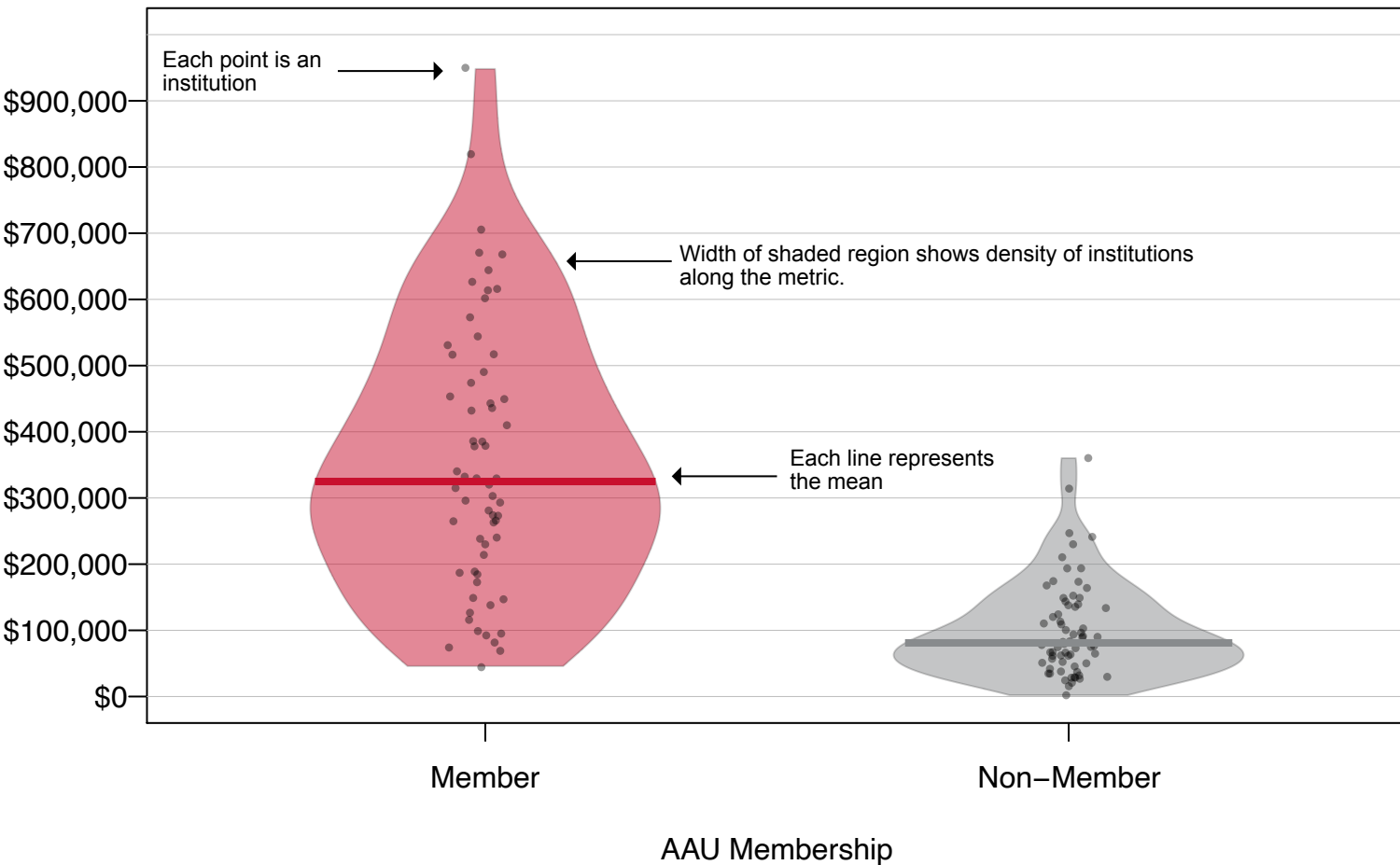


AAU Members Admitted by Decade, 1900–2019

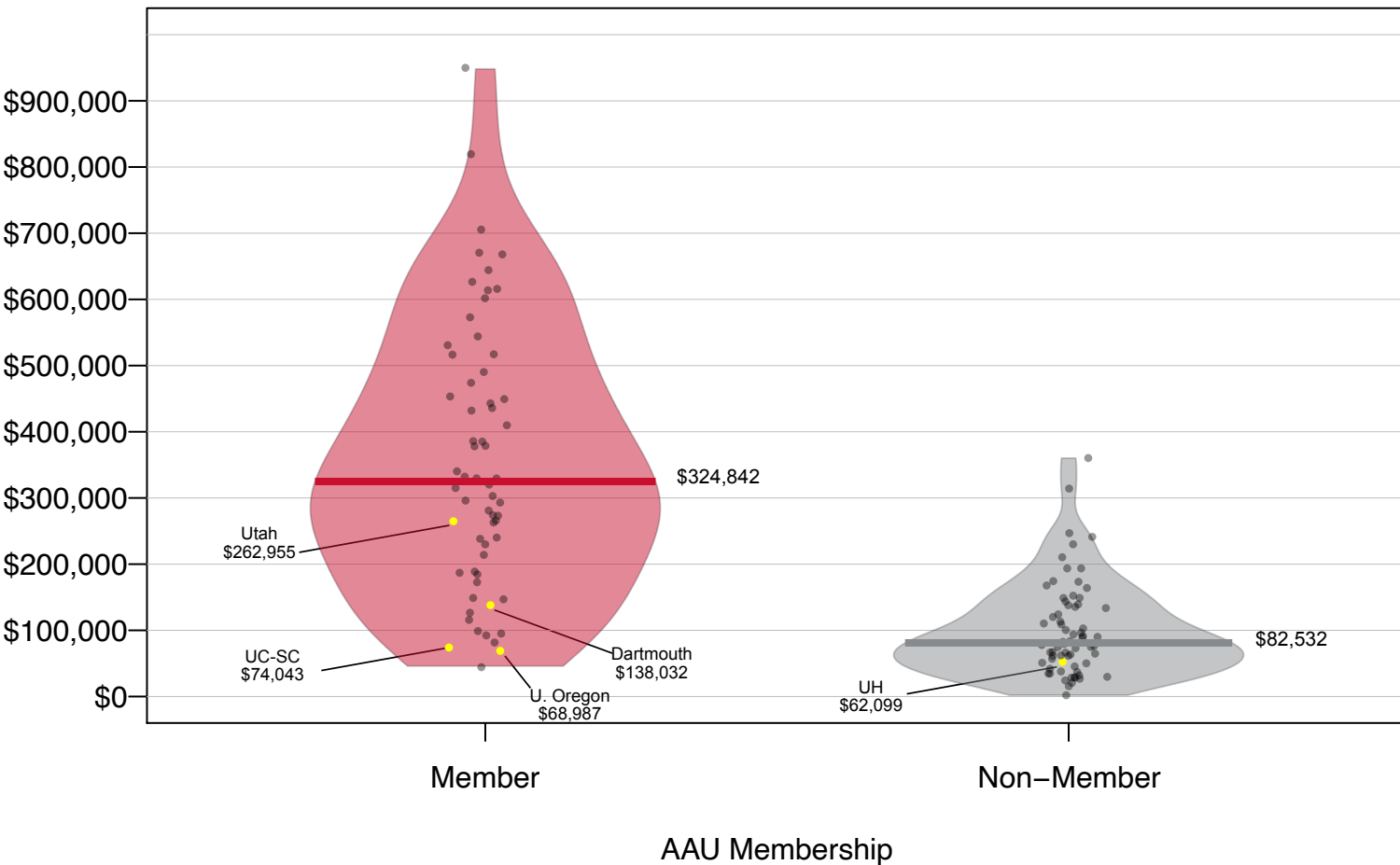


Membership Indicators

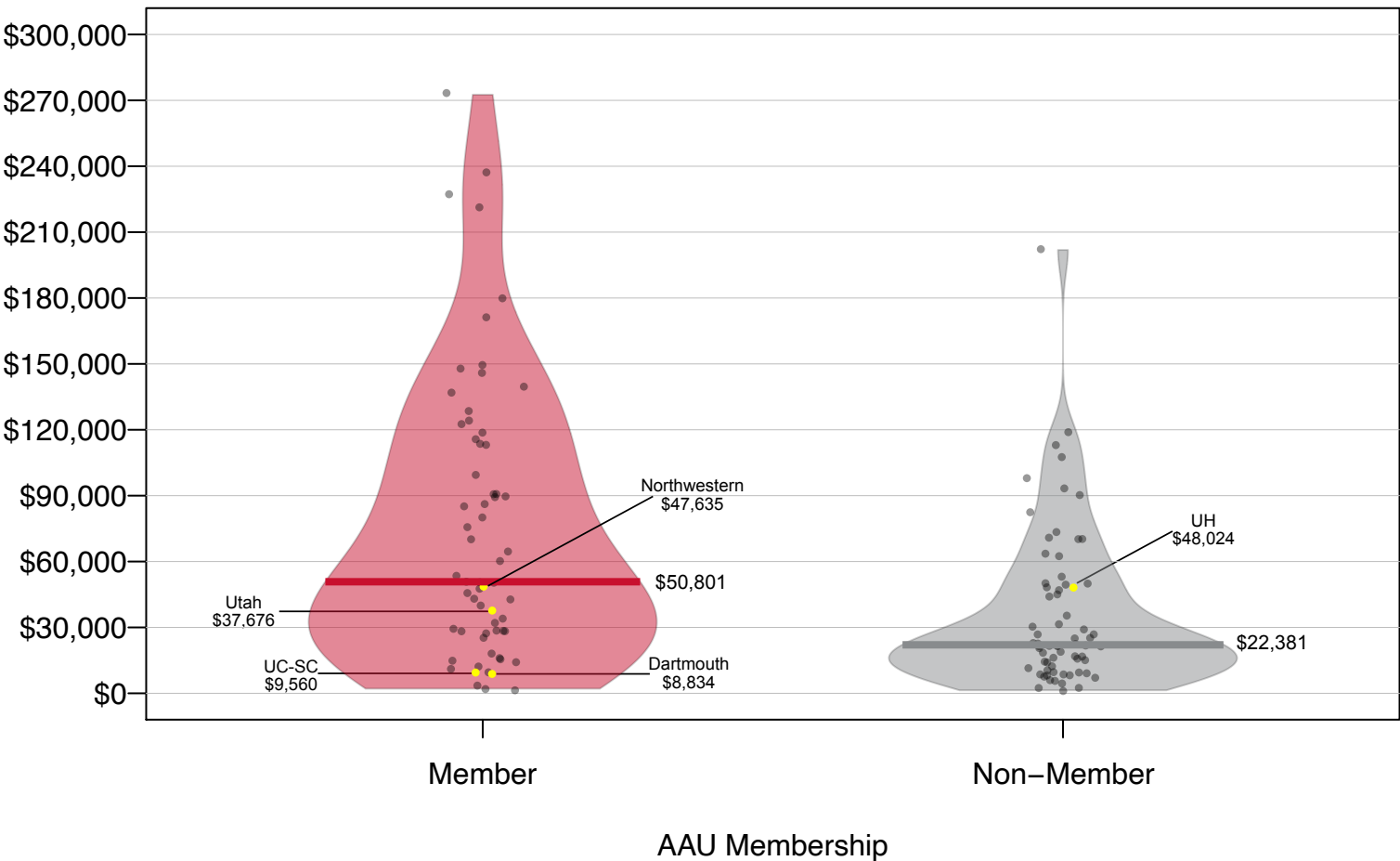
Three Year Average Federal Research Expenditures Minus USDA, 2016–2018



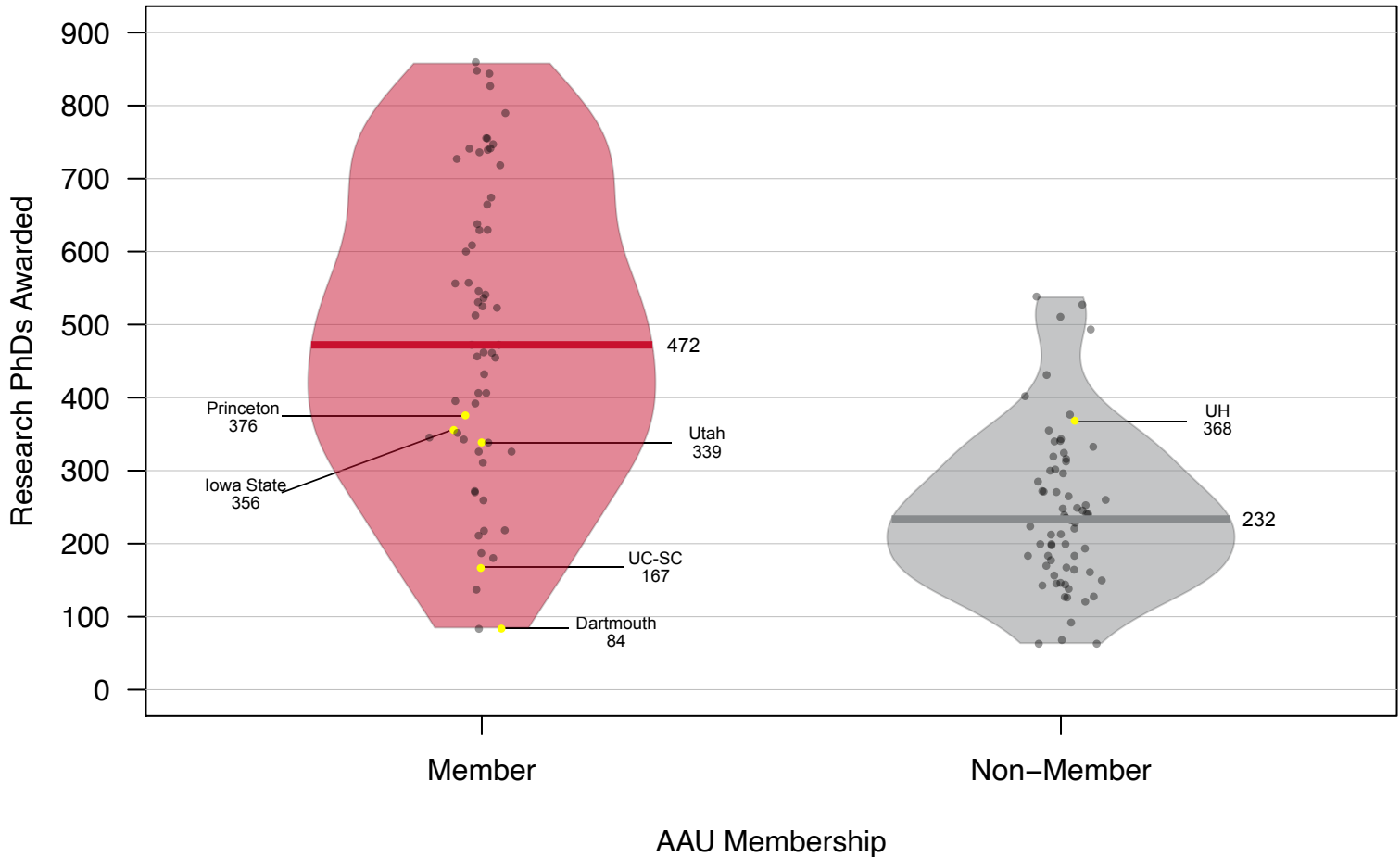
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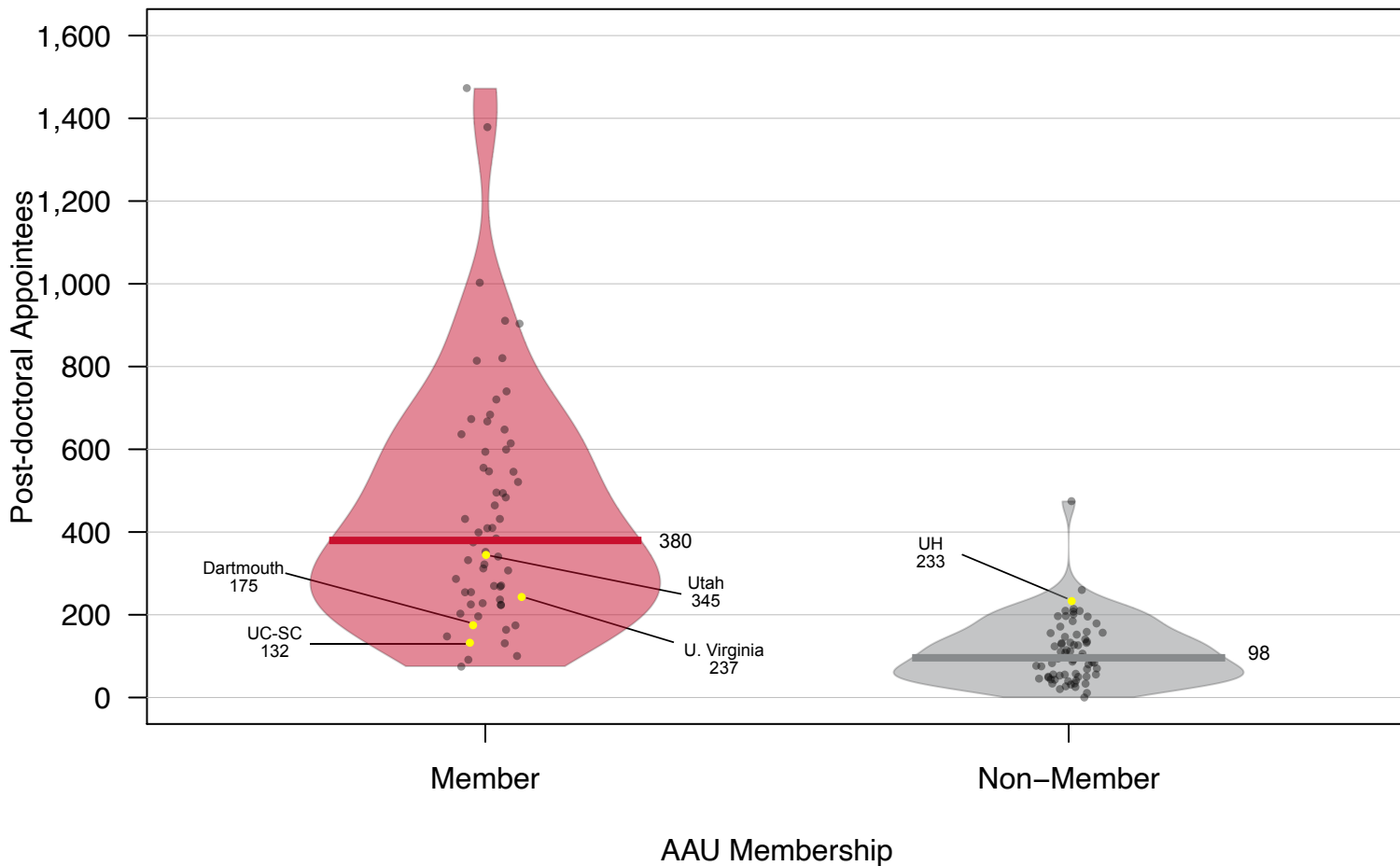
Three Year Avg. Federal USDA, State, Local, Industry Research Funding, 2016–2018



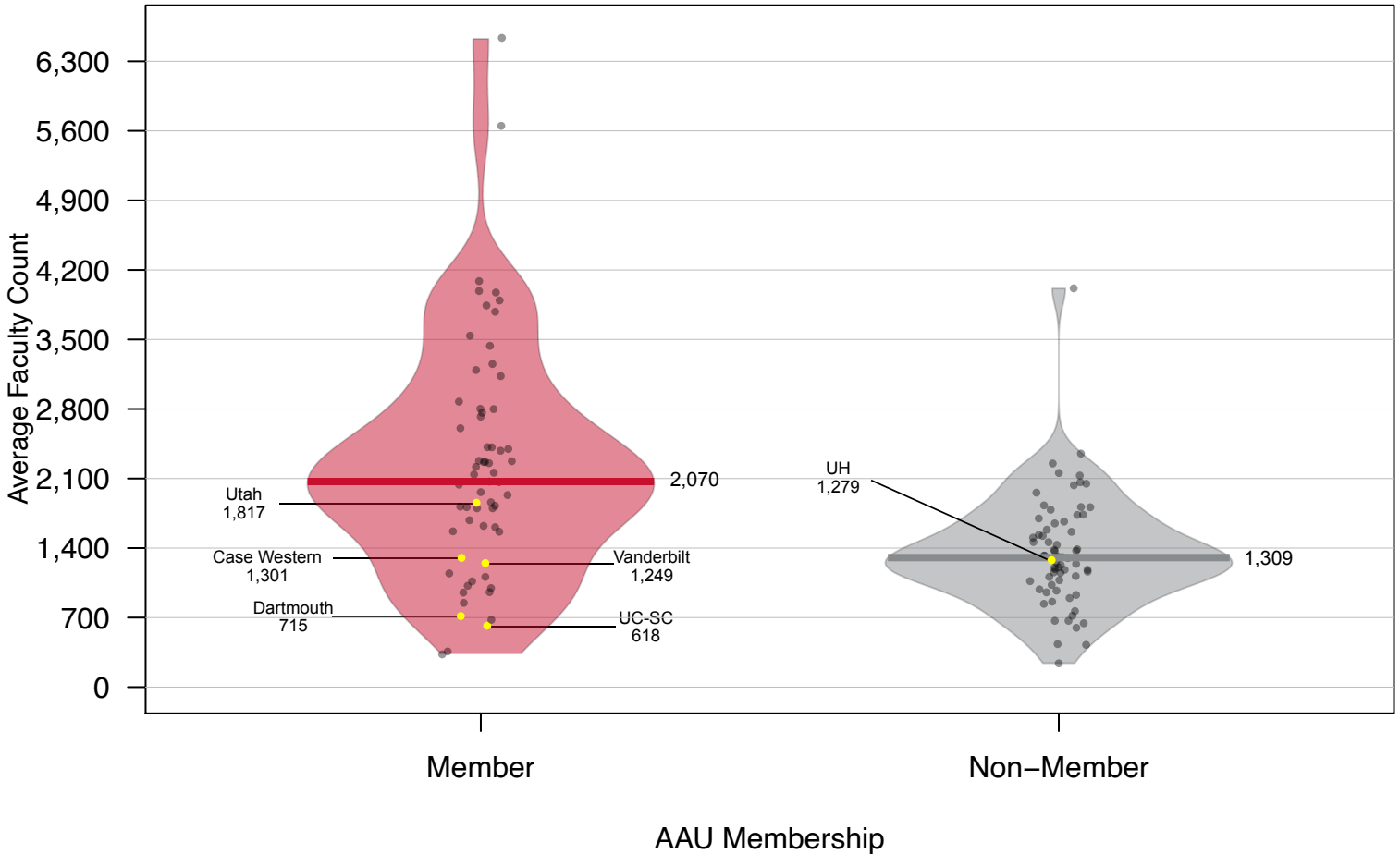
Three Year Average Research Doctorates Awarded, 2016–2018



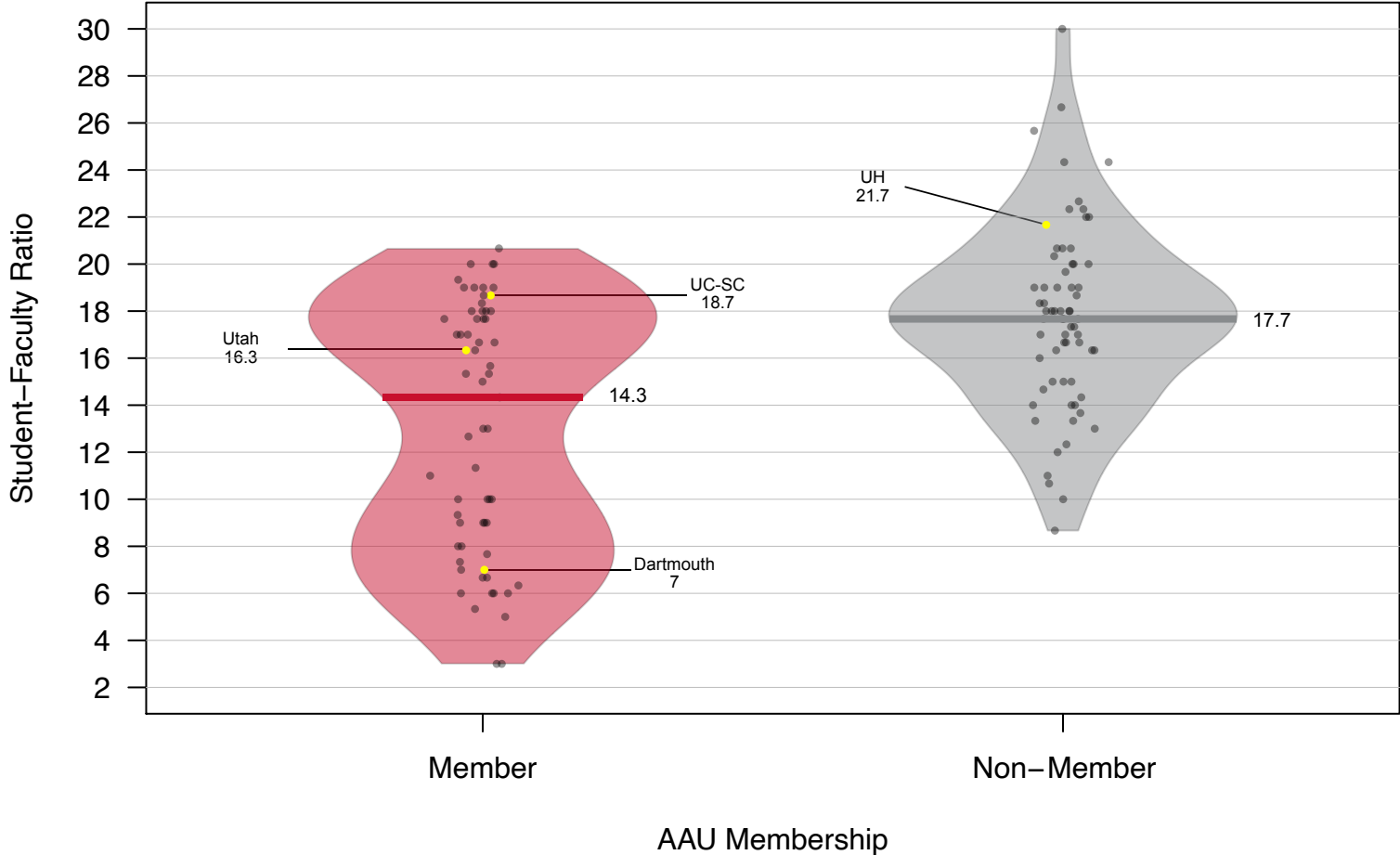
Three Year Average Science & Engineering Post-Doctoral Appointees, 2016–2018



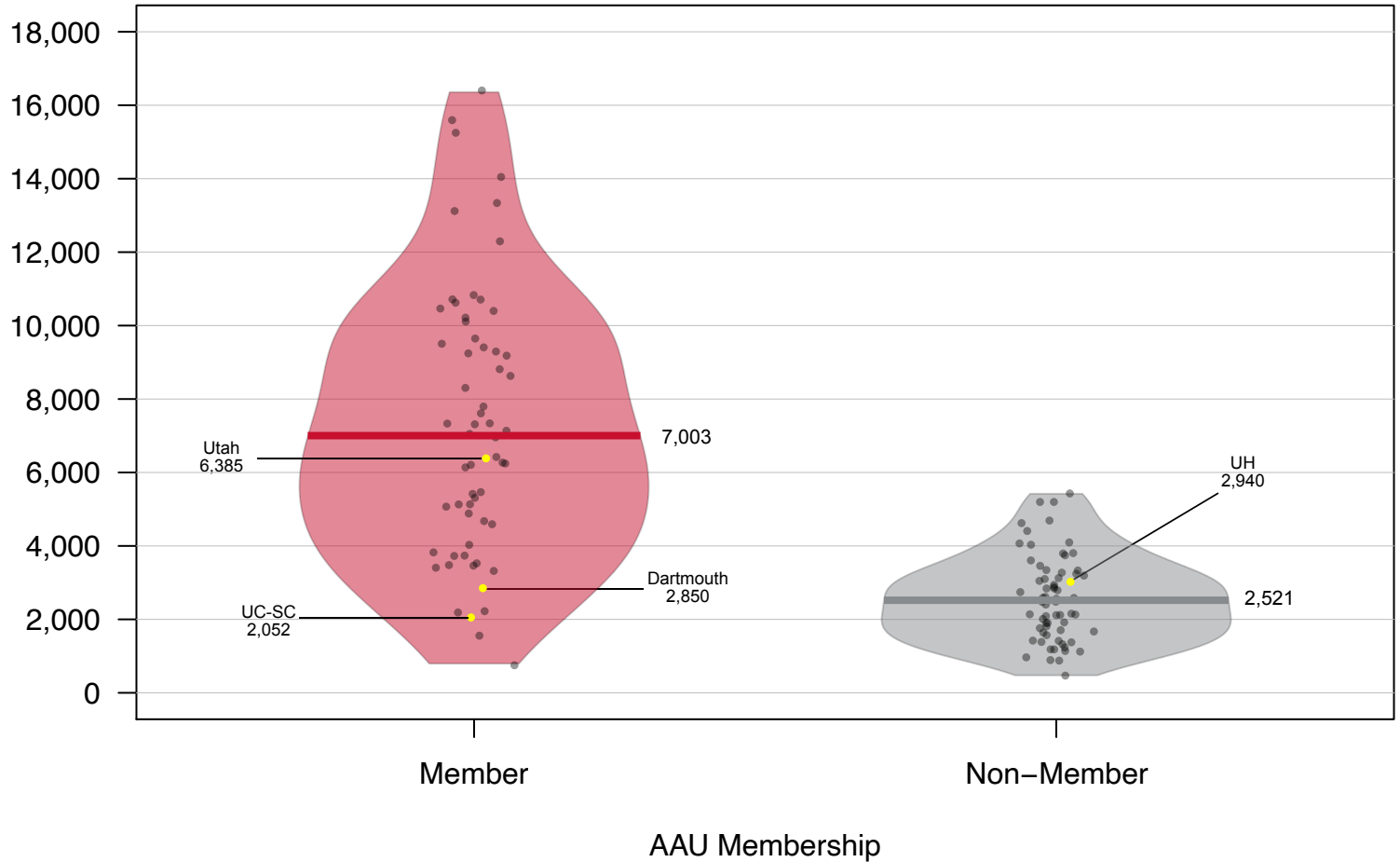
Three Year Average Ranked Faculty, 2016–2018



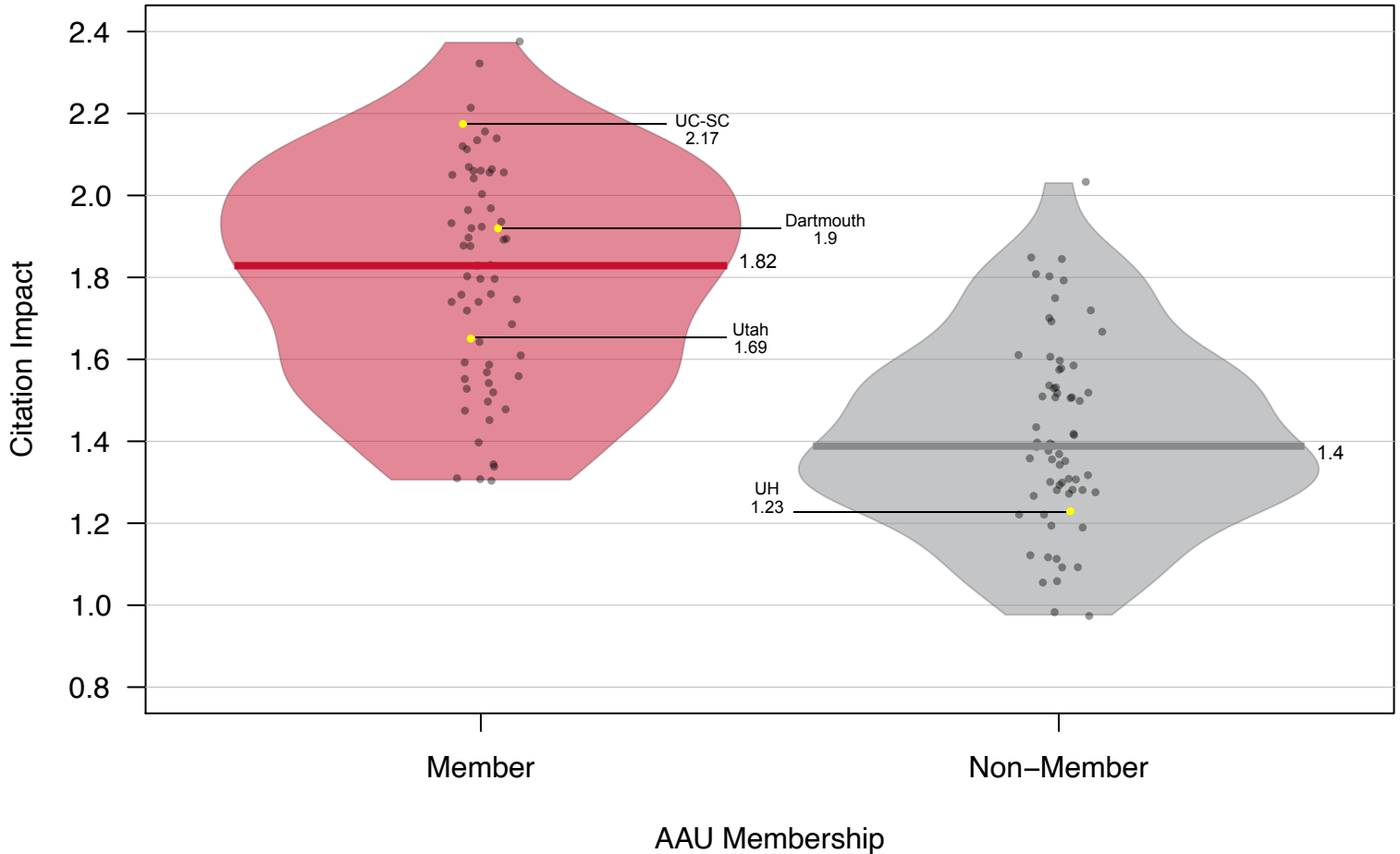
Three Year Average Student–Faculty Ratio, 2016–2018



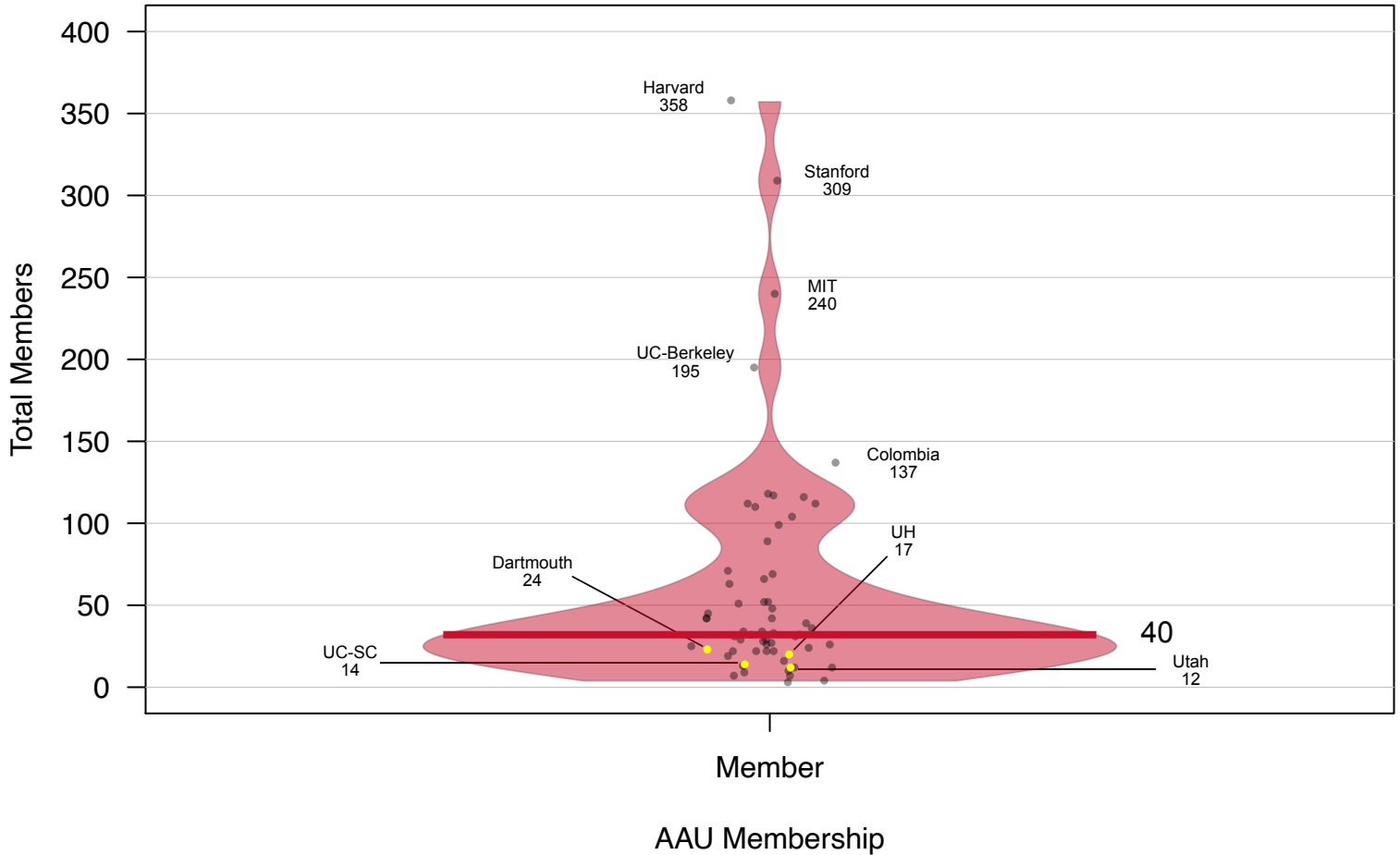
Three Year Average Web of Science Docs, 2016–2018



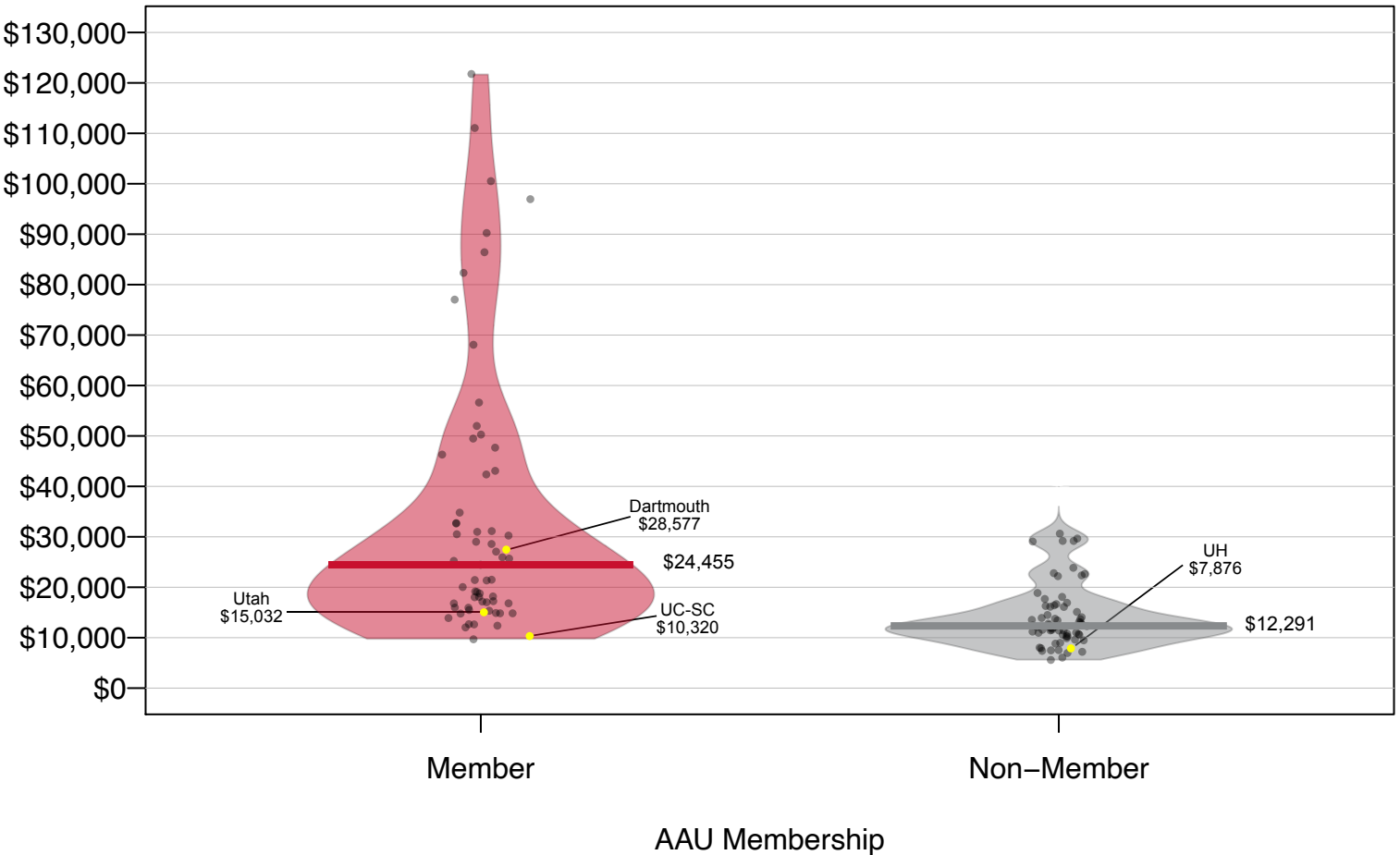
Three Year Average Citation Impact, 2016–2018



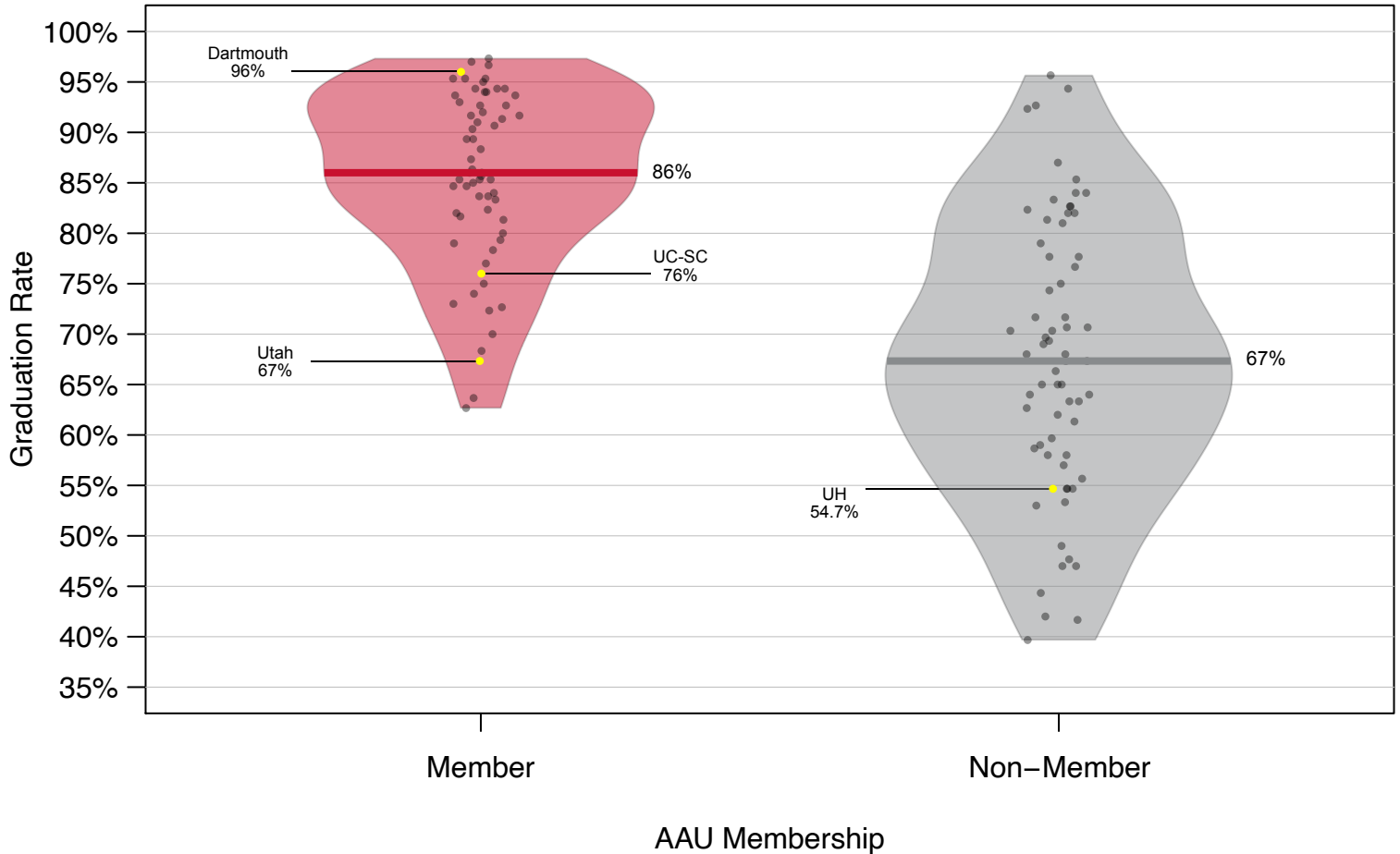
Total National Academy Members



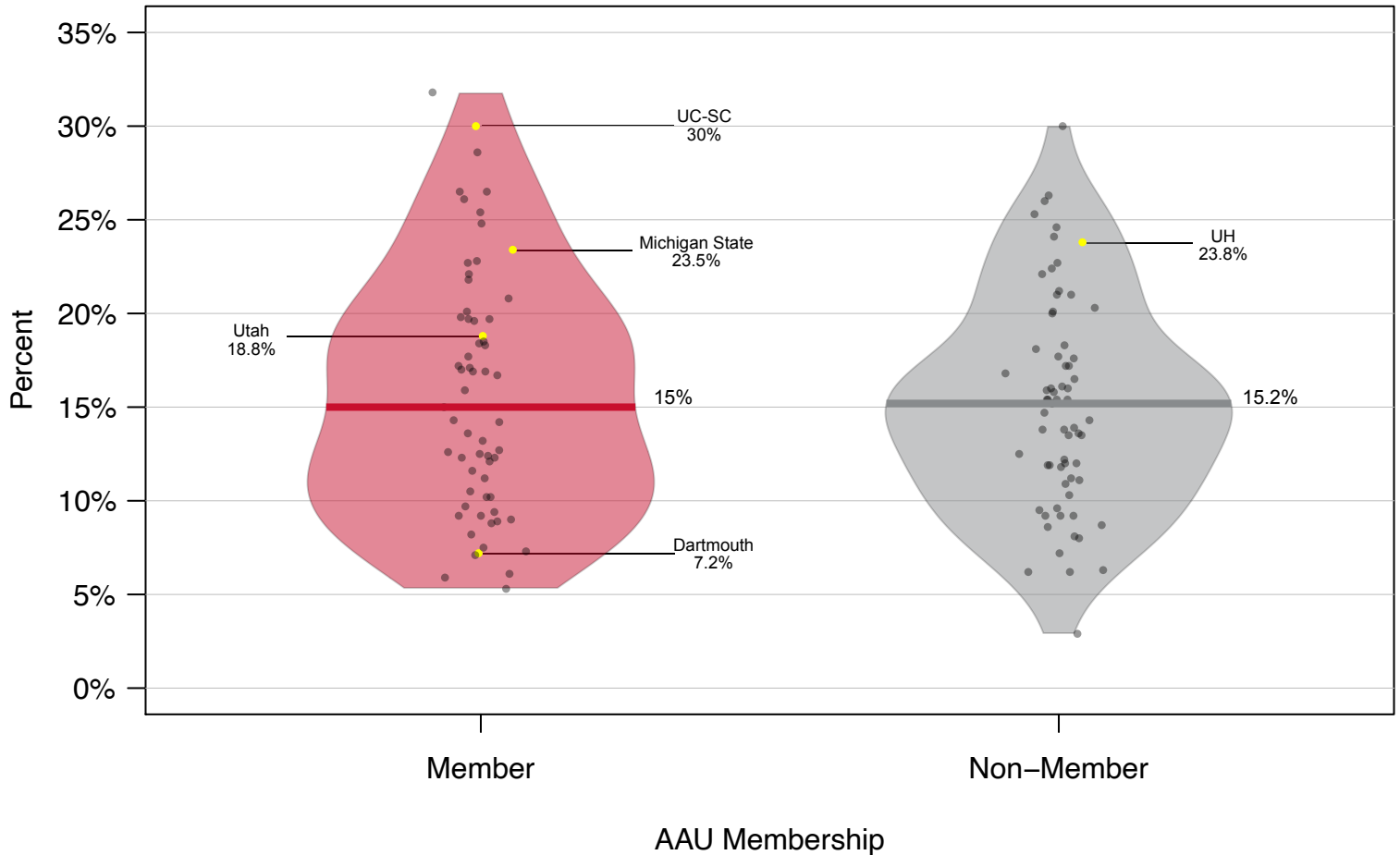
Three Year Average Instruction Expenses per FTE, 2016–2018



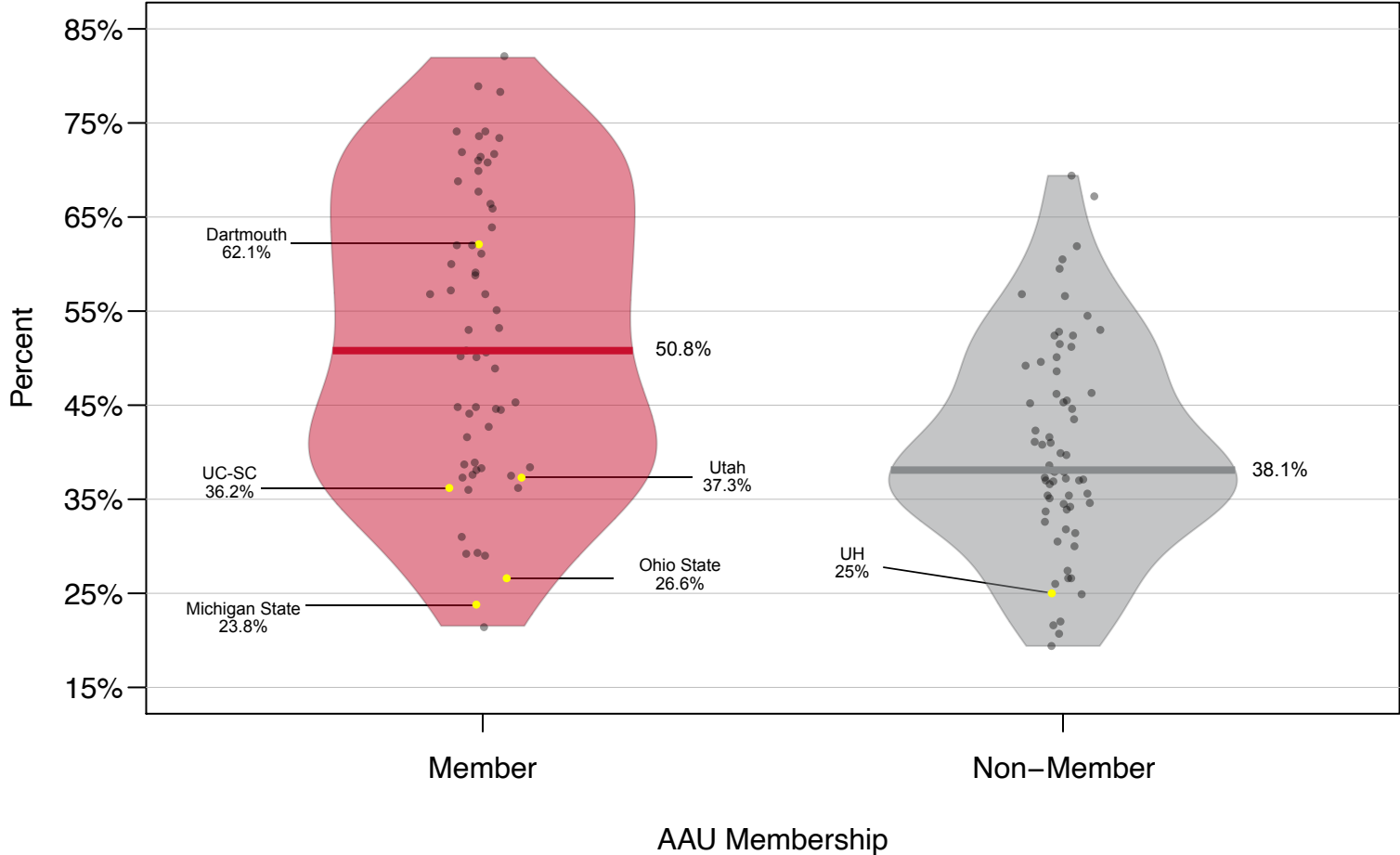
Three Year Average Six-Year Graduation Rate, 2016–2018



Percent of Classes 50+, US News Issue Year 2020



Percent of Classes with Fewer than 20, US News Issue Year 2020



Affiliations*

AAU Membership	Not Affiliated	Affiliated
Member	29%	71%
Non-Member	58%	42%

*Affiliated with the ACC, Big Ten, Big 12, PAC 12, SEC or IVY League Conferences or part of the University of California System

AAU Members not affiliated by entry year

Institution	Year
Johns Hopkins University	1900
University of Chicago	1900
University of Minnesota-Twin Cities	1908
Washington University in St Louis	1923
California Institute of Technology	1934
Massachusetts Institute of Technology	1934
University of Rochester	1941
New York University	1950
Tulane University of Louisiana	1958
Michigan State University	1964
Case Western Reserve University	1969
Carnegie Mellon University	1982
Brandeis University	1985
Rice University	1985
University at Buffalo	1985
Emory University	1995
Stony Brook University	2001
Boston University	2012

Conclusions

Measure	Improve	On Par	Excel
Federal Research Expenditure (-RDA)	X		
Federal USDA, State, Local, Industry Research			X
Research/Scholarship Doctorates Awarded			X
Science and Engineering Postdoctoral Appointees		X	
Ranked Faculty	X		
Student-Faculty Ratio	X		
Web of Science Documents		X	
Citation Impact	X		
National Academy Members		X	
Instructional Expenses per FTE	X		
Six Year Graduation Rate (IPEDS)	X		
Percent of Classes with 50+ Students (Issue Year 2020)	X		
Percent of Classes with < 20 Students (Issue Year 2020)	X		
Affiliations	X		

Appendix

Three-Year Averages (2016-2018)

Measure	UH	Non-Member Median	AAU Median	Dartmouth	UC-SC	Utah
Federal Research Expenditure (-RDA)	\$ 62,099	\$ 82,532	\$ 324,842	\$ 138,032	\$ 74,043	\$ 262,955
Federal USDS, State, Local, Industry Research	\$48,024	\$ 22,381	\$ 50,801	\$ 8,834	\$9,560	\$ 37,676
Research/Scholarship Doctorates Awarded	368	232	472	84	167	339
Science and Engineering Postdoctoral Appointees	233	98	380	175	132	345
Ranked Faculty	1,279	1,309	2,070	715	618	1,817
Student-Faculty Ratio	21.7	17.7	14.3	7	18.7	16.3
Web of Science Documents	2,940	2,521	7,003	2,850	2,052	6,385
Citation Impact	1.23	1.40	1.82	1.90	2.17	1.69
National Academy Members	17	NA	40	24	14	12
Instructional Expenses per FTE	\$7,876	\$12,291	\$24,455	\$28,577	\$10,320	\$15,032
Six Year Graduation Rate (IPEDS)	54.7%	67%	86%	96%	76%	67%
Percent of Classes with 50+ Students (Issue Year 2020)	23.8%	15.2%	15.0%	7.2%	30.0%	18.8%
Percent of Classes with <20 Students (Issue Year 2020)	25.0%	38.1%	50.8%	62.1%	36.2%	37.3%

AAU Members

Columbia University in the City of New York (1900)
Cornell University (1900)
Harvard University (1900)
Johns Hopkins University (1900)
Princeton University (1900)
Stanford University (1900)
University of California-Berkeley (1900)
University of Chicago (1900)
University of Michigan-Ann Arbor (1900)
University of Pennsylvania (1900)
University of Wisconsin-Madison (1900)
Yale University (1900)
University of Virginia-Main Campus (1904)
University of Illinois at Urbana-Champaign (1908)
University of Minnesota-Twin Cities (1908)
University of Missouri-Columbia (1908)
Indiana University-Bloomington (1909)
University of Iowa (1909)
University of Kansas (1909)
Ohio State University-Main Campus (1916)
Northwestern University (1917)
University of North Carolina at Chapel Hill (1922)
Washington University in St Louis (1923)
The University of Texas at Austin (1929)
Brown University (1933)
California Institute of Technology (1934)
Massachusetts Institute of Technology (1934)
Duke University (1938)
University of Rochester (1941)
New York University (1950)
University of Washington-Seattle Campus (1950)

Vanderbilt University (1950)
Iowa State University (1958)
Pennsylvania State University-Main Campus (1958)
Purdue University-Main Campus (1958)
Tulane University of Louisiana (1958)
Michigan State University (1964)
University of Colorado Boulder (1966)
Case Western Reserve University (1969)
University of Maryland-College Park (1969)
University of Oregon (1969)
University of Southern California (1969)
University of California-Los Angeles (1974)
University of Pittsburgh-Pittsburgh Campus (1974)
Carnegie Mellon University (1982)
University of California-San Diego (1982)
Brandeis University (1985)
Rice University (1985)
University of Arizona (1985)
University of Florida (1985)
Rutgers University-New Brunswick (1989)
University at Buffalo (1989)
Emory University (1995)
University of California-Santa Barbara (1995)
University of California-Davis (1996)
University of California-Irvine (1996)
Stony Brook University (2001)
Texas A & M University-College Station (2001)
Georgia Institute of Technology-Main Campus (2010)
Boston University (2012)
Dartmouth College (2019)
University of California-Santa Cruz (2019)
University of Utah (2019)

Non-Members

Arizona State University-Tempe
Auburn University
Binghamton University
Boston College
Clemson University
Colorado State University-Fort Collins
Drexel University
Florida International University
Florida State University
George Mason University
George Washington University
Georgetown University
Georgia State University
Kansas State University
Louisiana State University and Agricultural & Mechanical College
Mississippi State University
Montana State University
New Jersey Institute of Technology
North Carolina State University at Raleigh
Northeastern University
Oklahoma State University-Main Campus
Oregon State University
Rensselaer Polytechnic Institute
SUNY at Albany
Syracuse University
Temple University
Texas Tech University
The University of Alabama
The University of Tennessee-Knoxville
The University of Texas at Arlington
The University of Texas at Dallas
The University of Texas at El Paso
Tufts University
University of Alabama at Birmingham

University of Arkansas
University of California-Riverside
University of Central Florida
University of Cincinnati-Main Campus
University of Colorado Denver/Anschutz Medical Campus
University of Connecticut
University of Delaware
University of Georgia
University of Hawaii at Manoa
University of Houston
University of Illinois at Chicago
University of Kentucky
University of Louisville
University of Massachusetts-Amherst
University of Miami
University of Mississippi
University of Nebraska-Lincoln
University of Nevada-Las Vegas
University of Nevada-Reno
University of New Hampshire-Main Campus
University of New Mexico-Main Campus
University of North Texas
University of Notre Dame
University of Oklahoma-Norman Campus
University of South Carolina-Columbia
University of South Florida-Main Campus
University of Southern Mississippi
University of Wisconsin-Milwaukee
Virginia Commonwealth University
Virginia Polytechnic Institute and State University
Washington State University
Wayne State University
West Virginia University