

Academic Life: Tenure, Promotion, & More

- **University-ese Vocabulary**
- **Tenure – What, How, Why**
- **Why are faculty so ...**
- **Pressures on current practices**

**Data from American Institute of Physics,
NSF, NCES, and AAUP**

Open your Chat:

Do you now have, or have you had in the past, an “Academic” position?

(Asst/Assoc/Full Prof., Research Prof., Adjunct/Instructor, Postdoc, etc.)

If so, describe briefly.

Academic Vocabulary Test

- Assistant Prof
- Associate Prof
- Full Professor
- Chair
- Dean
- Director
- Endowed Prof
- Endowed Chair
- Emeritus Prof
- Regent
- Trustee
- Grad Assistant
- Instructor
- President
- Chancellor
- Provost
- Renewable Term Prof
- Adjunct Prof
- Research Prof
- VP, Research
- VP, Admin
- CIO

President/Chancellor/etc.
Provost (Academic VP)
VP Research, VP Admin, CIO, ...
Dean ("College")

Trustees
Regents ...

"Soft" Money

Dept. Chair/Director
Endowed Prof/Chair
(Full) Professor
Associate Prof
Assistant Prof
~Renew. Term Prof~

"Hard" Money

Research Professor
Research Scientist
Renew. Term Prof.
Post Doctoral
Researcher
Grad Res Assistant
Instructor
Adjunct Instructor

The “Tenure Track”



Chat: Define Academic Tenure

Tenure & Academic Freedom

Tenure ... is a means to assure unfettered, unbiased, unencumbered search, verification, and communication **of truth** by professional scholars and teachers. Tenure is designed to provide faculty members **with freedom** from political, doctrinaire, and other pressures, restraints, and reprisals which would otherwise inhibit the **independent thought** and actions in their professional responsibility of search, verification, and communication **of truth**.

Academic Time-Line: PhD?



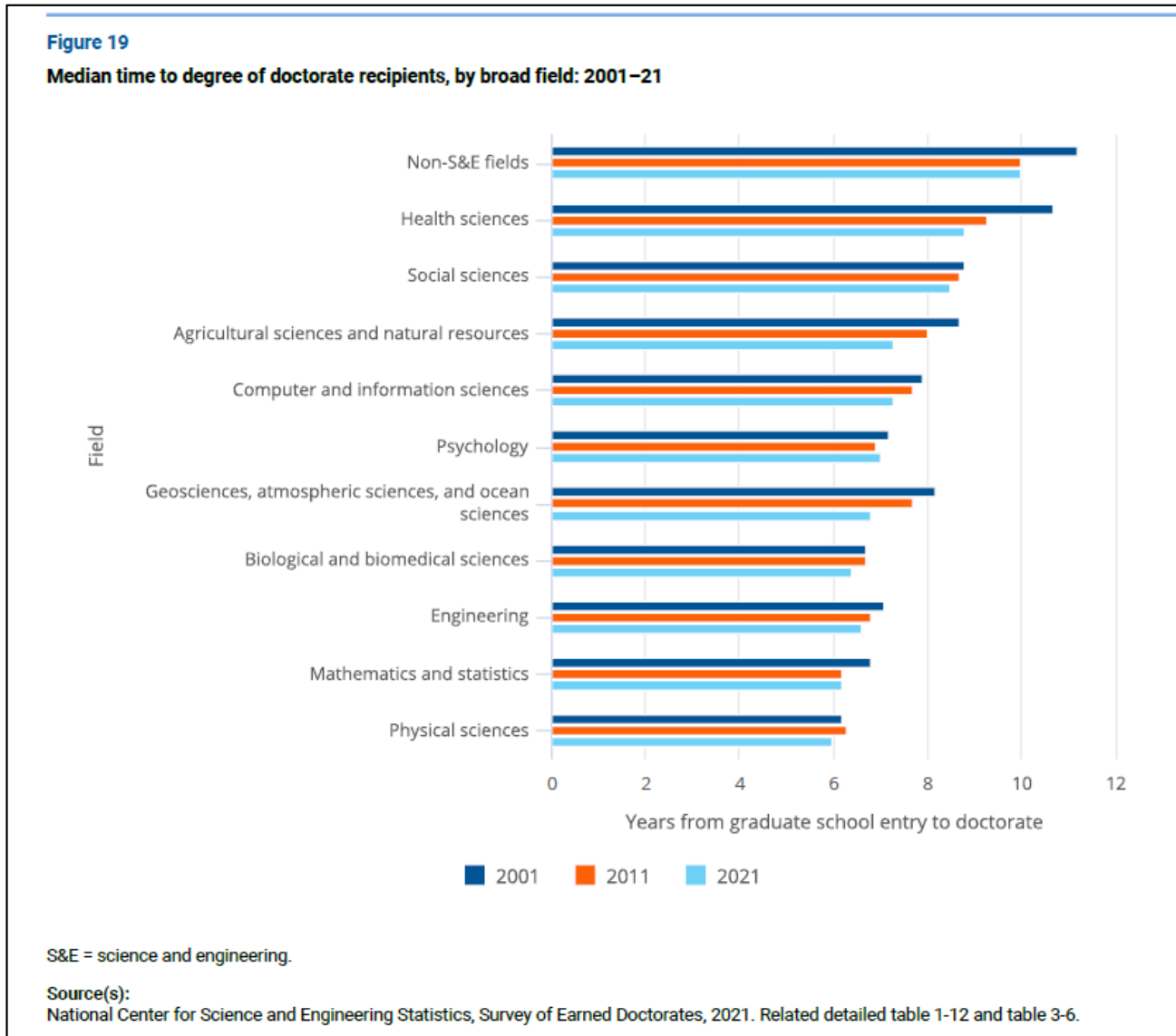
Prof

Assoc Prof

Asst Prof

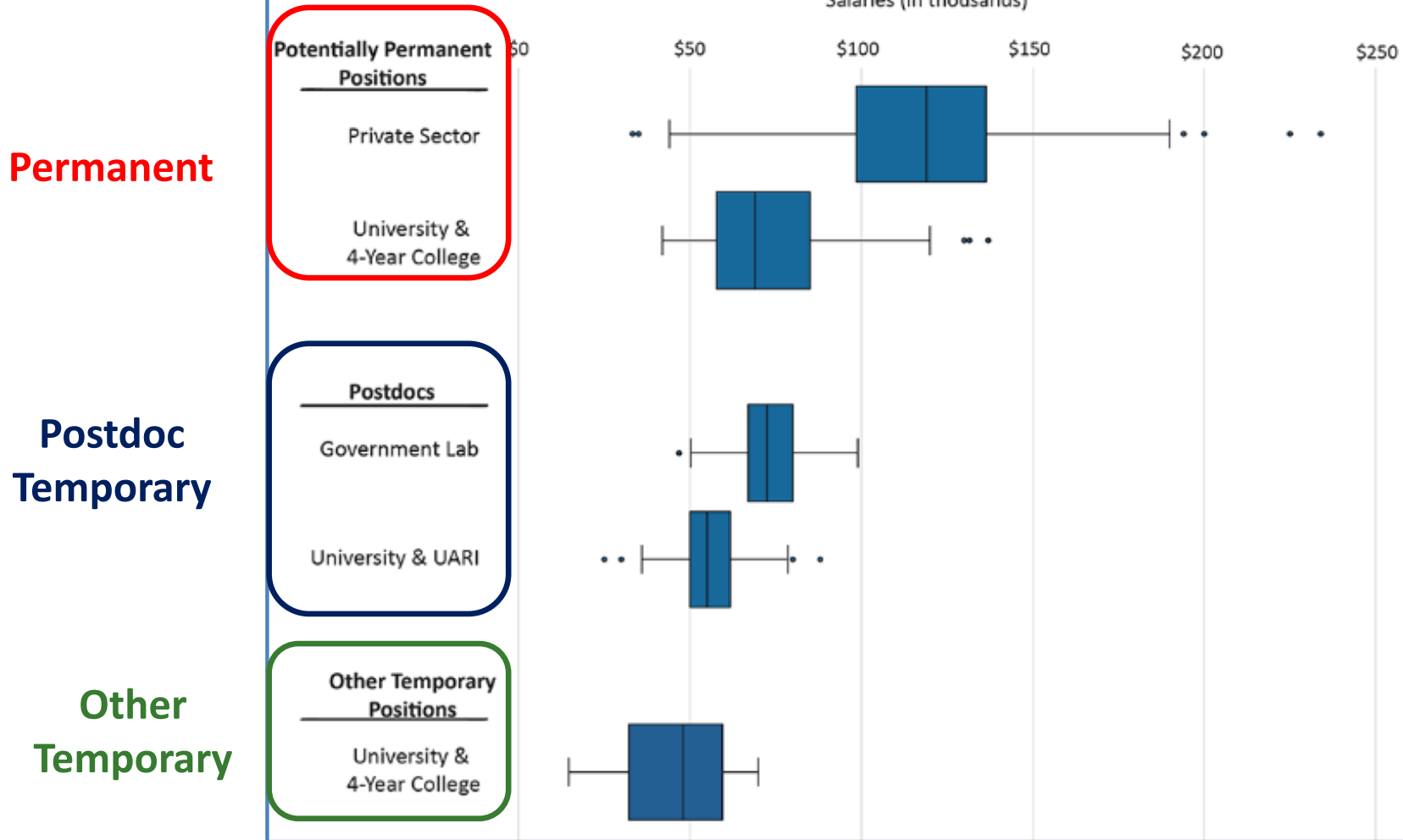
Finish PhD – Year 6

Graduate School – Year 0



Physics Ph.D. Starting Salaries

Starting Salaries for New Physics PhDs, Classes of 2019 & 2020 Combined



Academic Time-Line: Start Tenure?



Prof

Assoc Prof

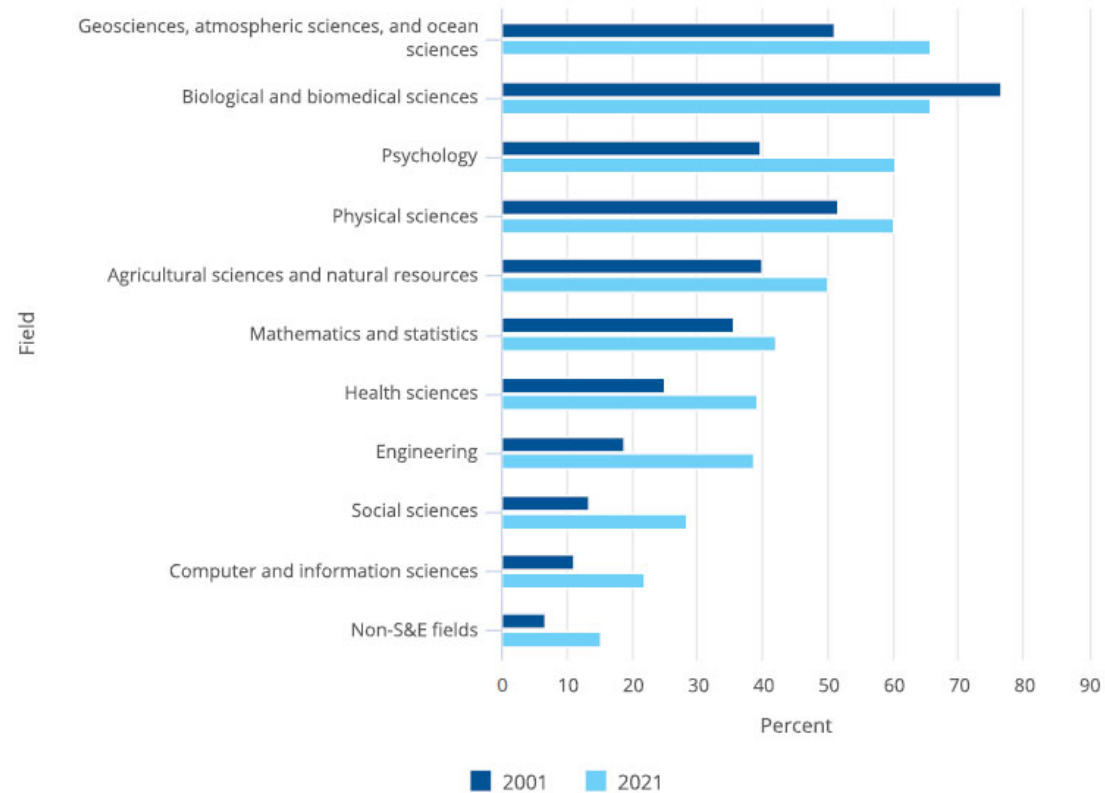
Asst Prof – Year 10

Finish PhD – Year 6

Graduate School – Year 0

Figure 23

U.S. postdoctorate rate for doctorate recipients, by broad field: 2001 and 2021



S&E = science and engineering.

Academic Time-Line: Tenured?



Prof

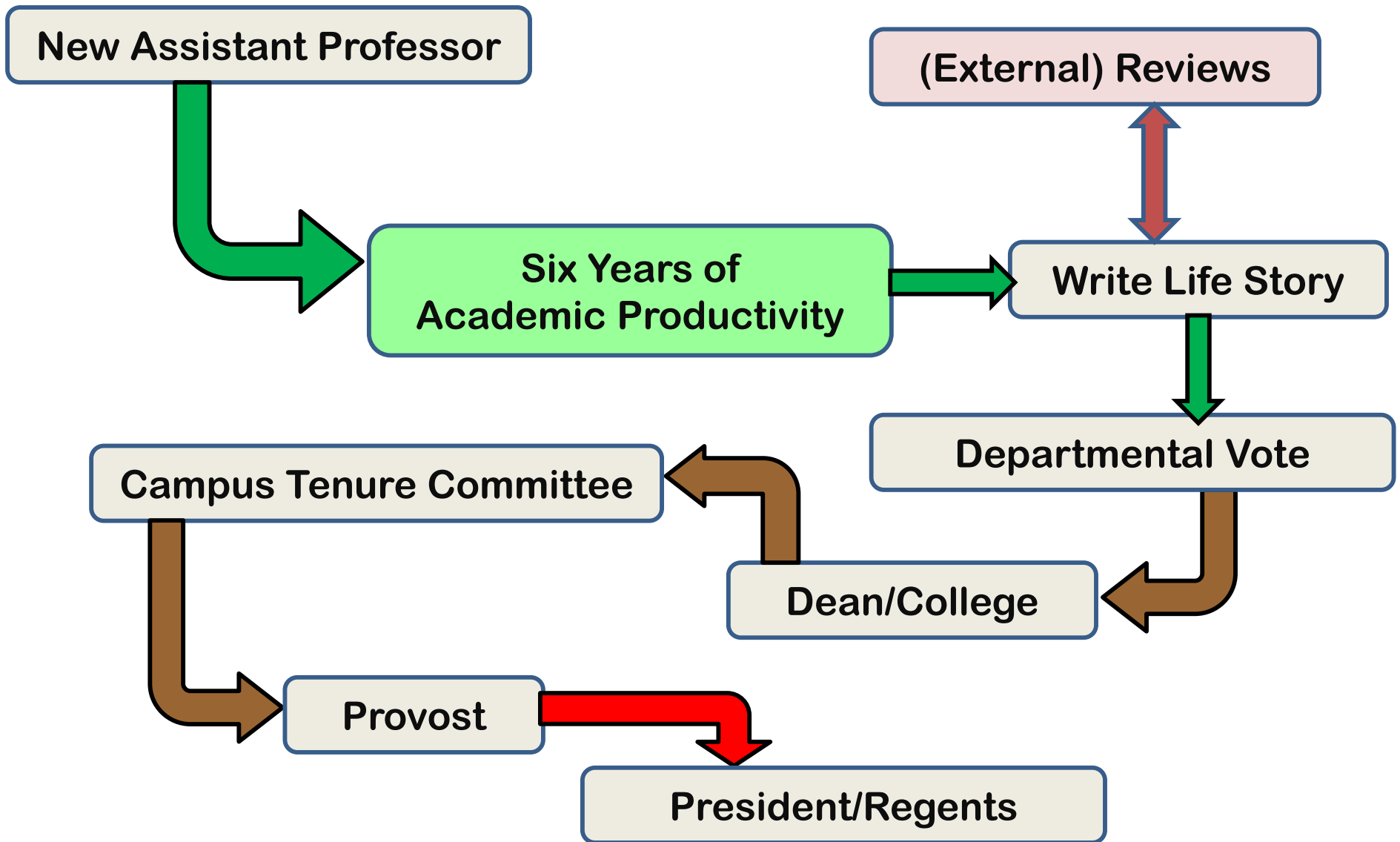
Associate Prof – Year 17, Tenured (~40 yr old)

Assistant Prof – Year 10

Finish PhD – Year 6

Graduate School – Year 0

The Tenure Decision



“Academic Productivity”

- **Publications**
- **Money**
- **Patents**
- **Collaborations**
- **Reputation**
- **Talks**
- **Consulting**
- **Student Mentoring**
- **Teaching**
- **Service**

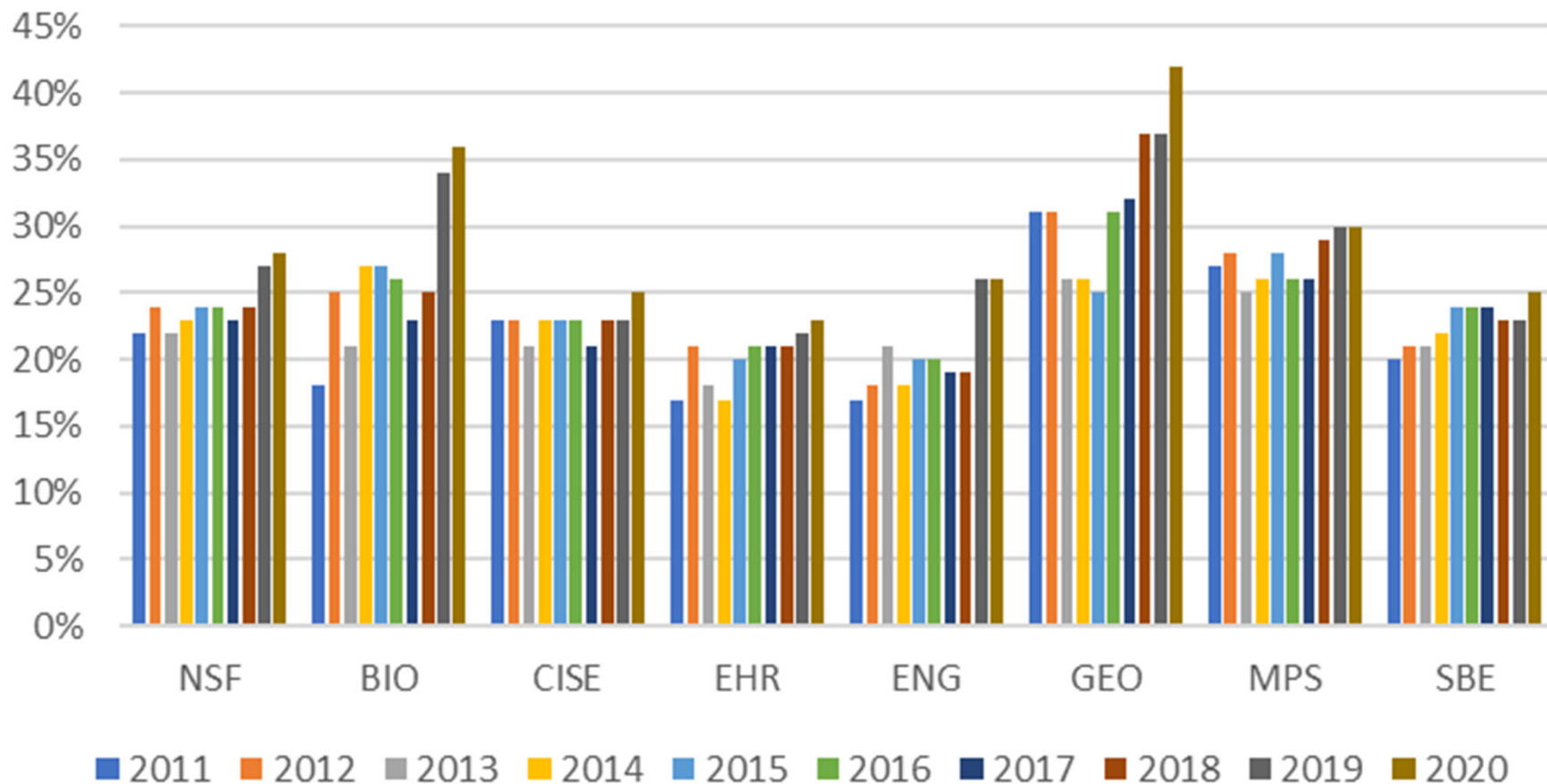
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- **Teaching**
- **Service**

“Academic Productivity”

- **Publications (5% - 50%)**
- **Money (10 - 25% chance)**

NSF Funding Rate by Directorate



NIH : 19%
NEH: 10%

What's the Need?

Estimated Number of Recruitments for Physics Departments, 2018-19 Academic Year

| | Highest Physics Degree Offered | | | |
|--|--------------------------------|----------|------------|---------|
| | PhD | Master's | Bachelor's | Overall |
| Percent of Departments Recruiting | 66% | 51% | 37% | 45% |
| Number of Tenure/Tenure-Track Faculty Recruitments | 215 | 31 | 123 | 369 |
| Number of Temporary Full-Time Faculty Recruitments | 27 | 8 | 102 | 137 |
| Number of Non-Tenure-Track, Permanent Recruitments | 34 | 6 | 25 | 65 |

~370

~2000

AIP Statistics

aip.org/statistics

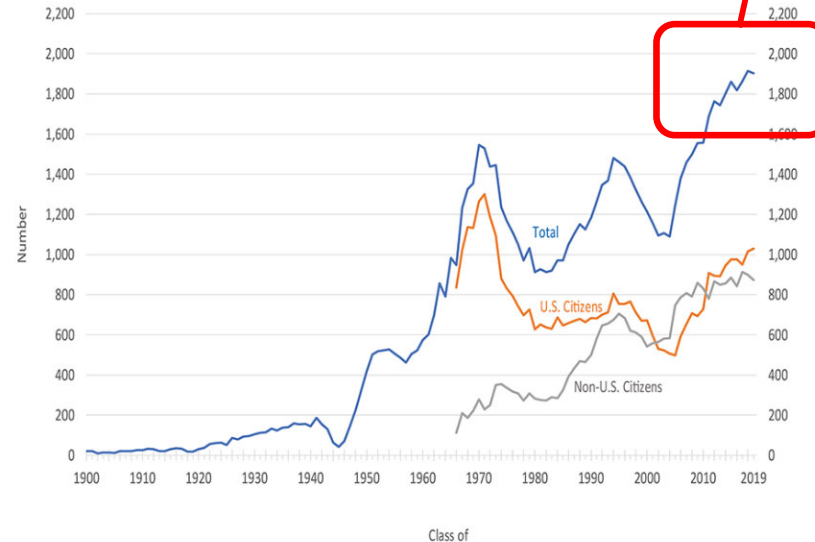
Estimated Number of Faculty Departures in Physics Departments, 2016-17 Academic Year

| | Highest Physics Degree Offered | | | |
|---|--------------------------------|----------|------------|---------|
| | PhD | Master's | Bachelor's | Overall |
| Number of Departures | 202 | 31 | 138 | 371 |
| Percent of Departures Among Faculty Members | 3.4% | 3.5% | 3.8% | 3.5% |
| Percent of Departments with Departures | 61% | 31% | 25% | 35% |
| Percent of Departing Faculty Members that Left Without Tenure | 10% | 15% | 24% | 16% |
| Total Headcount of Faculty Members | 6,015 | 870 | 3,615 | 10,500 |

~60

Note: The total headcount of faculty members is for the academic year of 2017-18. The total number of faculty members in this report differs from the total number reported in "The Number of Faculty Members in Physics Departments", which reported full-time equivalent (FTE) faculty totals, not headcount totals.

Physics PhDs Conferred in the US, 1900 through 2019



Sources: ACE (1900-1919), NAS (1920-1961), AIP (1962-2019)

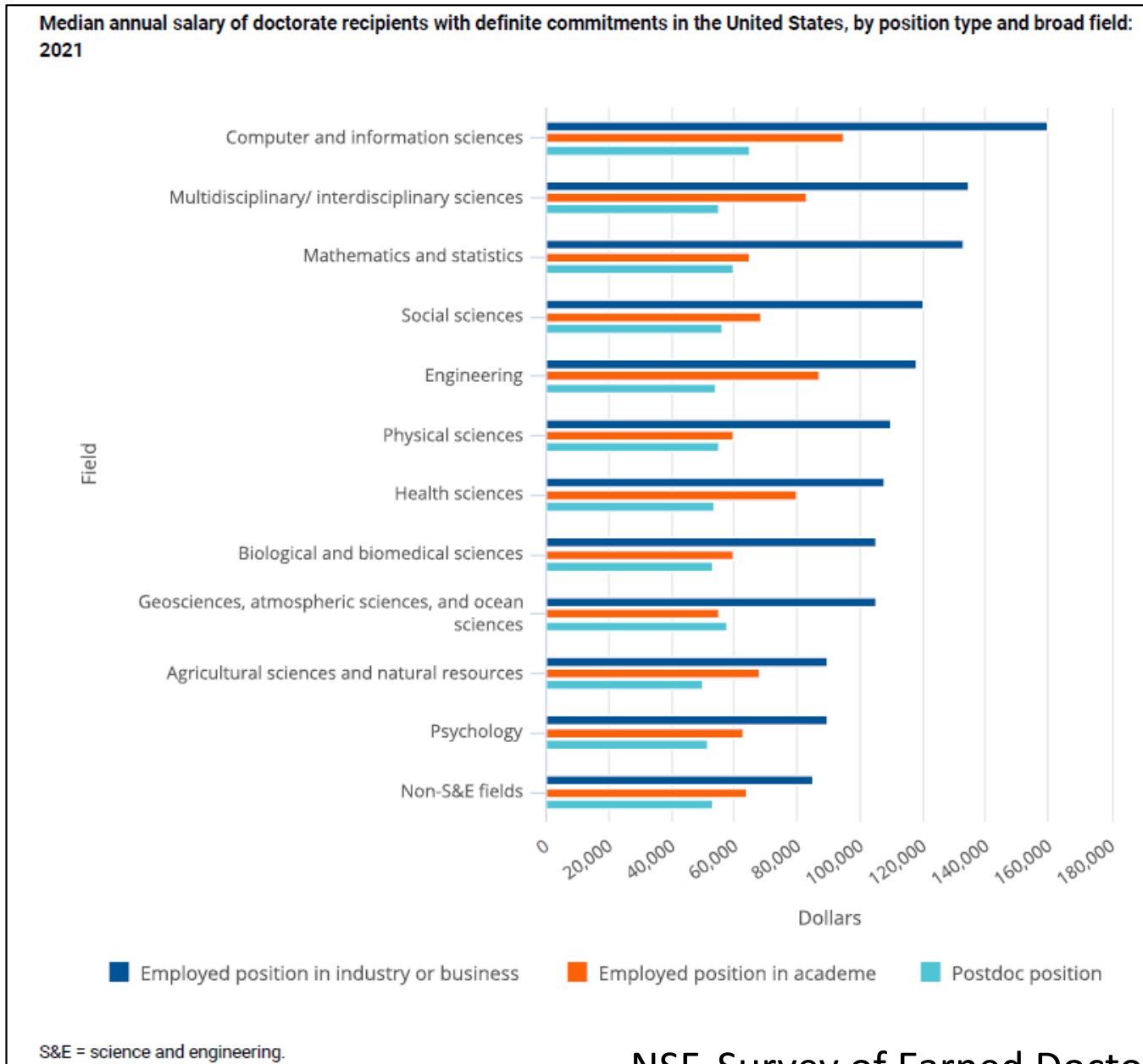
AIP Statistics

aip.org/statistics

AIP Statistics

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No Tenure, You Leave: Why do this???



NSF, Survey of Earned Doctorates, 2023

Independence, Education/Teaching, Prestige, No Imagination, ...

Researchers are Focused!

- **Measurement of the t-tbar production cross section and top quark mass extraction using dilepton events in p-pbar collisions**
- **To Swear Like a Sailor: Language, Culture, and Meaning in the American Maritime World, 1750 – 1850**
- **Elimination of threading dislocations in as-grown PbSe film on patterned Si(111) substrate using molecular beam epitaxy**

Academic Time-Line: “Full”?



Prof – Year ?

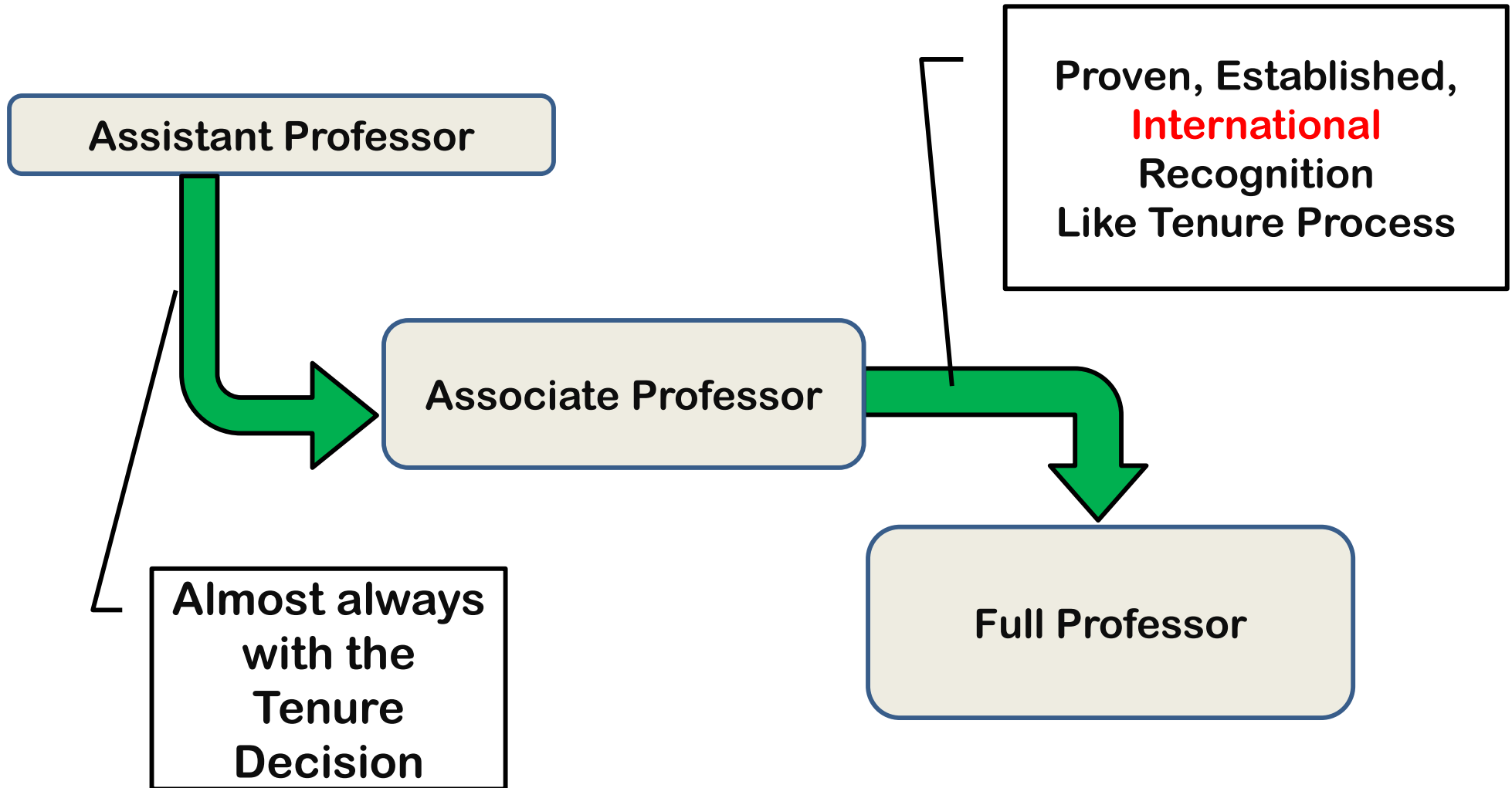
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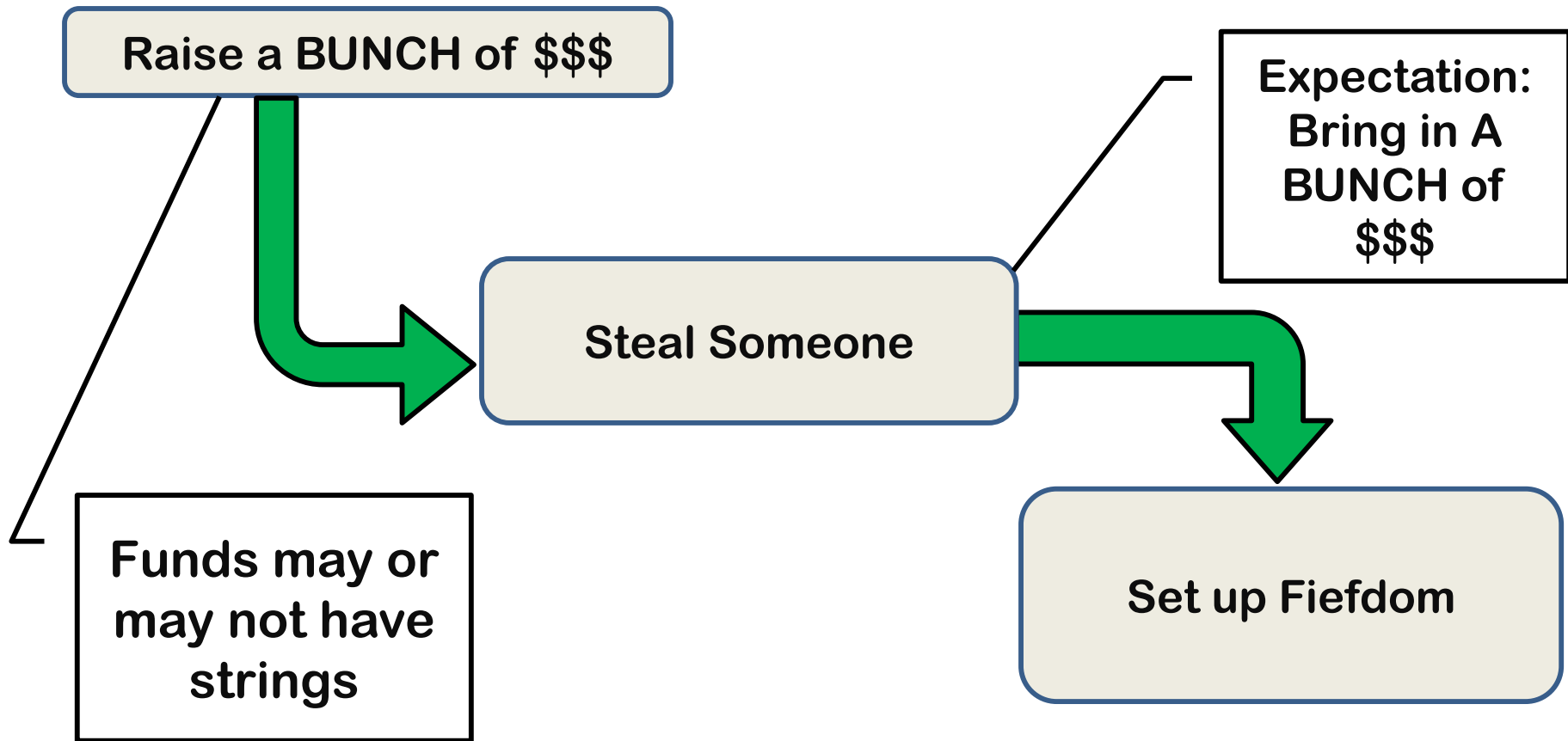
After Tenure 1: Promotion



Post-Tenure Academic Productivity

- **Publications**
- **Money**
- **Books**
- **International Talks**
- **Conference Committees**
- **Collaborations**
- **Disciplinary Service**
- **Public/Professional Service**
- **Leadership**
- **Instruction & Outreach**

Endowed Professorships (“Chairs”)



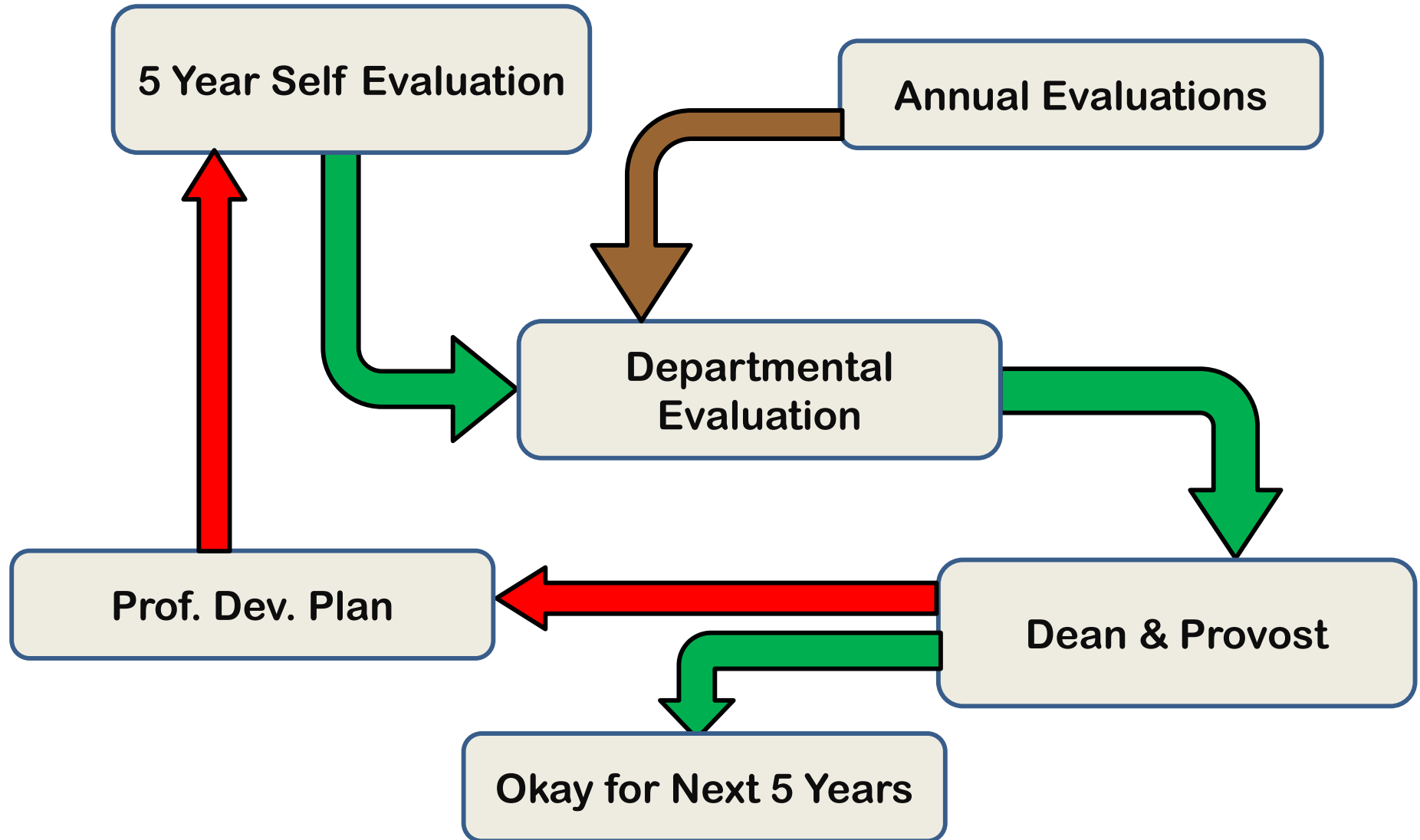
Changes? Impacts? Future?

Abrogation of Tenure

- Incompetence or Dishonesty
- Substantial Failure to Fulfill Duties
- Personal Behavior
- Failure to Adhere to University Policies
- Violations of the Law
- Elimination of Academic Unit
- Financial Emergency
- Post-Tenure Review

Created/Imposed

After Tenure 2: Post Tenure Review (Continuing Production)



Abrogation of Tenure

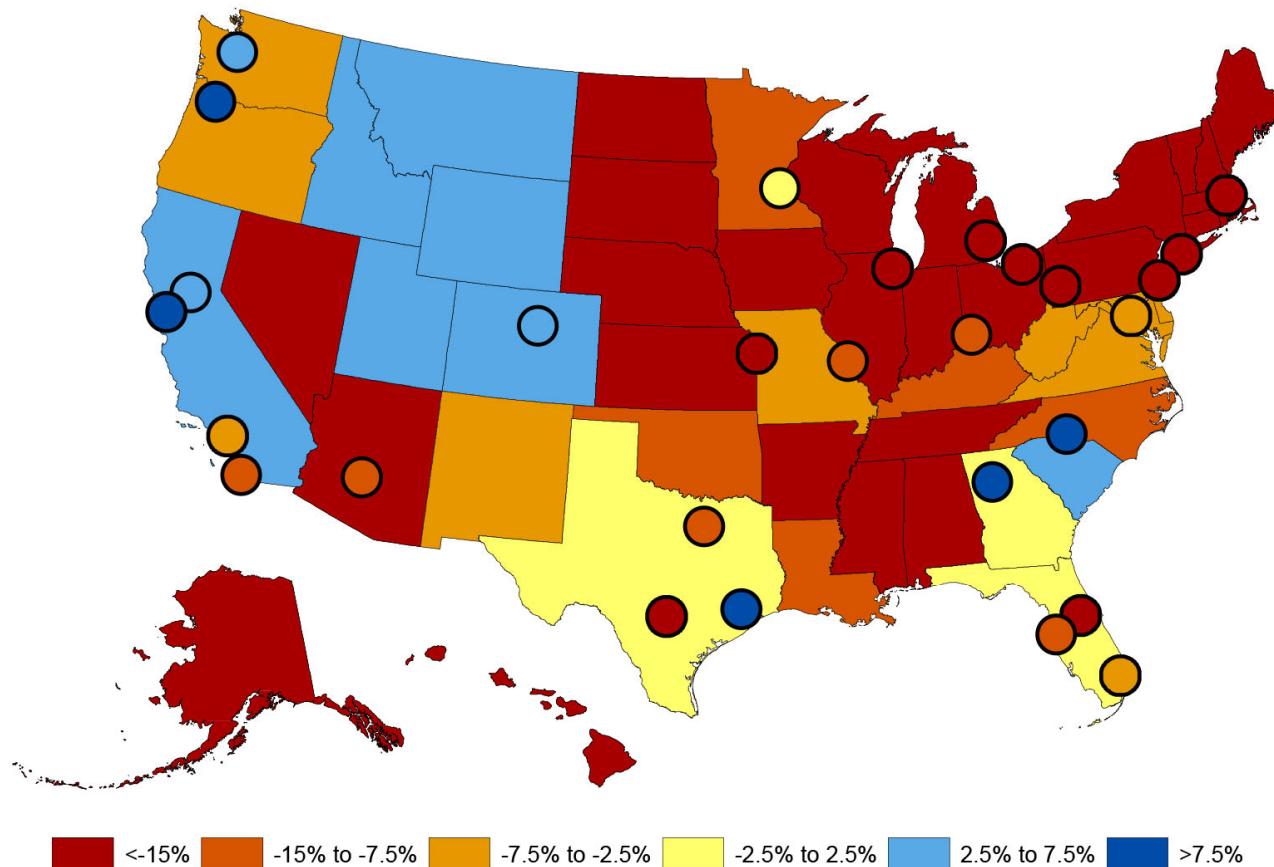
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**Student Population
“Cliff”**

Abrogation of Tenure

- Elimination of Academic Unit
- Financial Emergency (West Virginia U.)

Forecasted growth and decline in college-going students, 2012-2029



Source: Nathan D Grawe, Carleton College.pdf

Teaching?



General Dedication

**“DBER”: Discipline-Based
Education Research**

“Professors of Practice”



Tenure Numbers

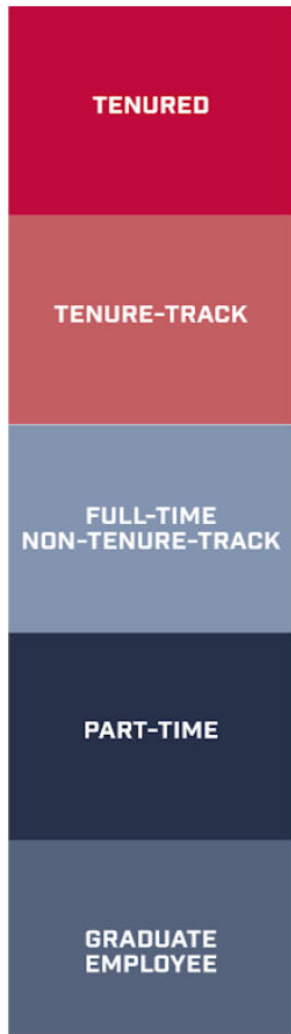
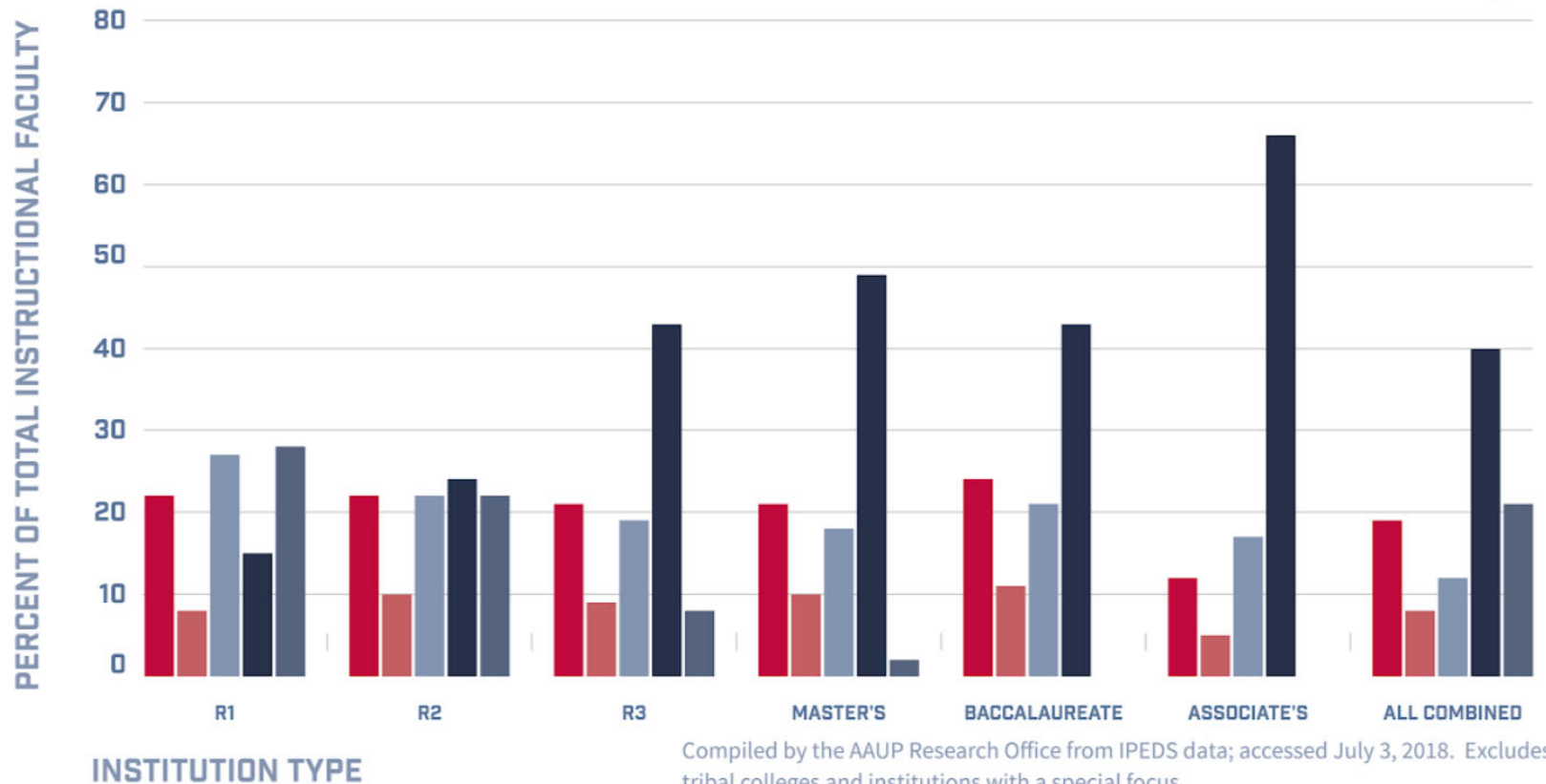


Figure 1

DISTRIBUTION OF THE INSTRUCTIONAL FACULTY WORKFORCE BY APPOINTMENT AND INSTITUTION TYPE, 2016

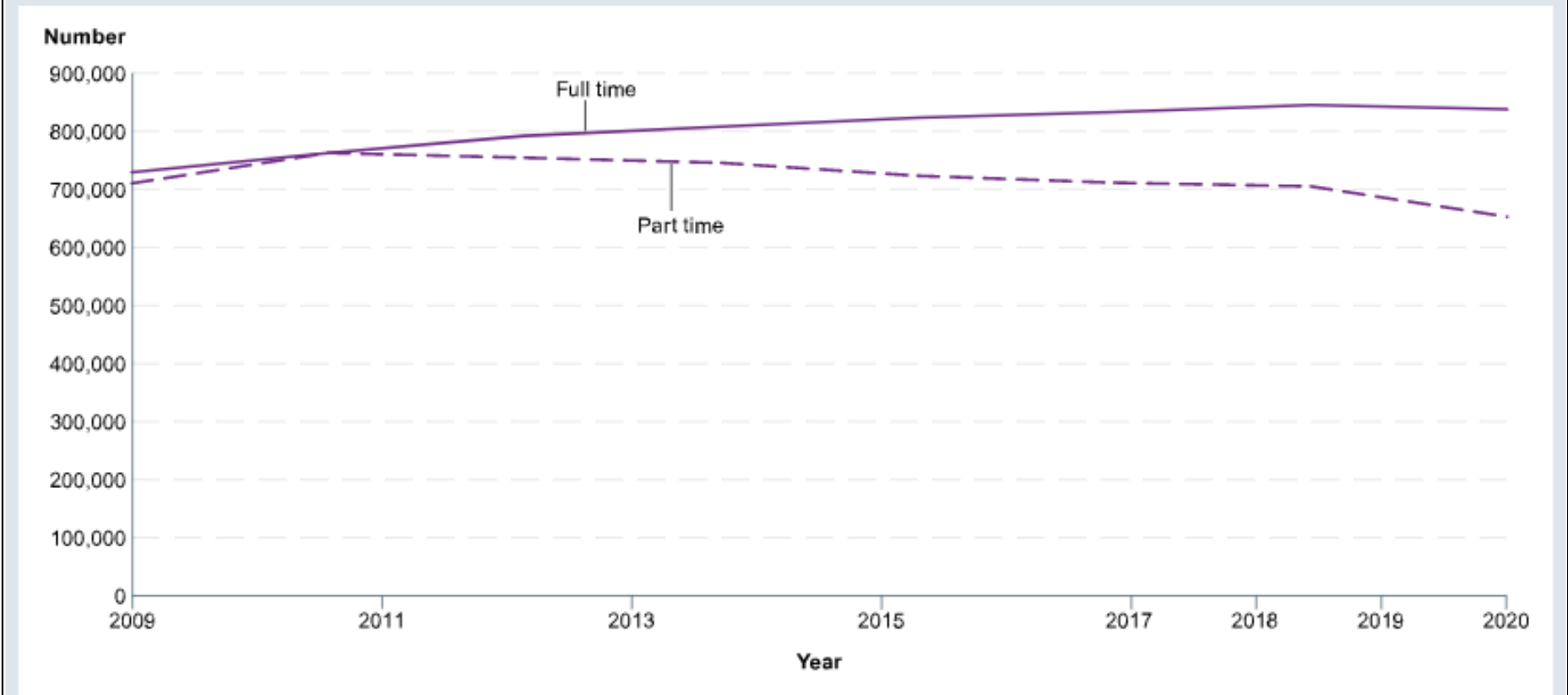


Compiled by the AAUP Research Office from IPEDS data; accessed July 3, 2018. Excludes tribal colleges and institutions with a special focus. Totals may not equal 100 percent because of rounding.

AAUP 2016

Change in Status: Fewer Part Time

Figure 1: Number of faculty in degree-granting postsecondary institutions, by employment status: Selected years, fall 2009 through fall 2020



National Center for Education Statistics, 2021

Change in Status: Fewer Tenured

FIGURE 1

The US academic workforce has shifted from mostly full-time tenured or tenure-track faculty to mostly contingent faculty.

Percentage of total number of faculty, by appointment type, fall 1987 through fall 2021

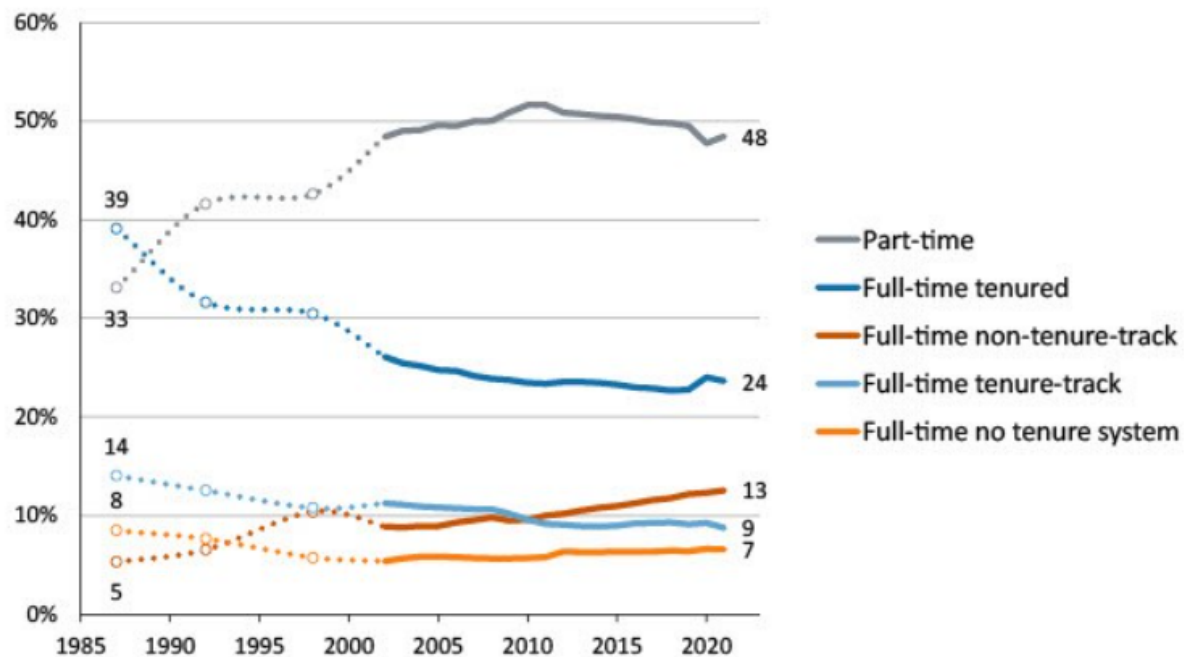
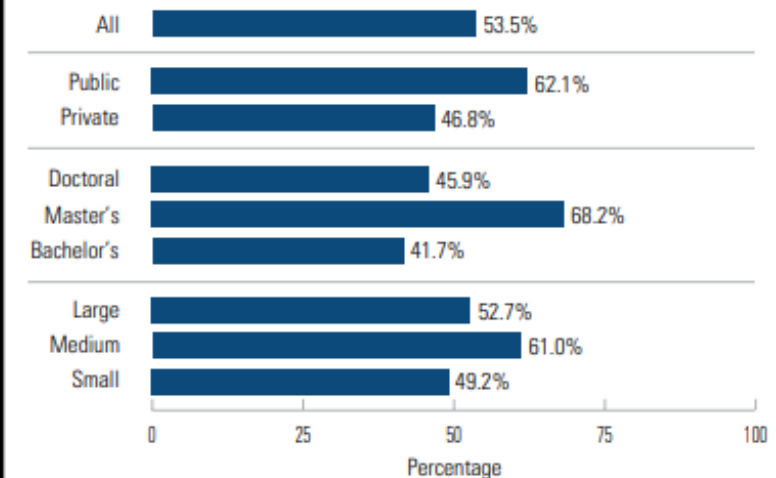


FIGURE 7

Institutions that have replaced tenure lines with contingent appointments in the last five years

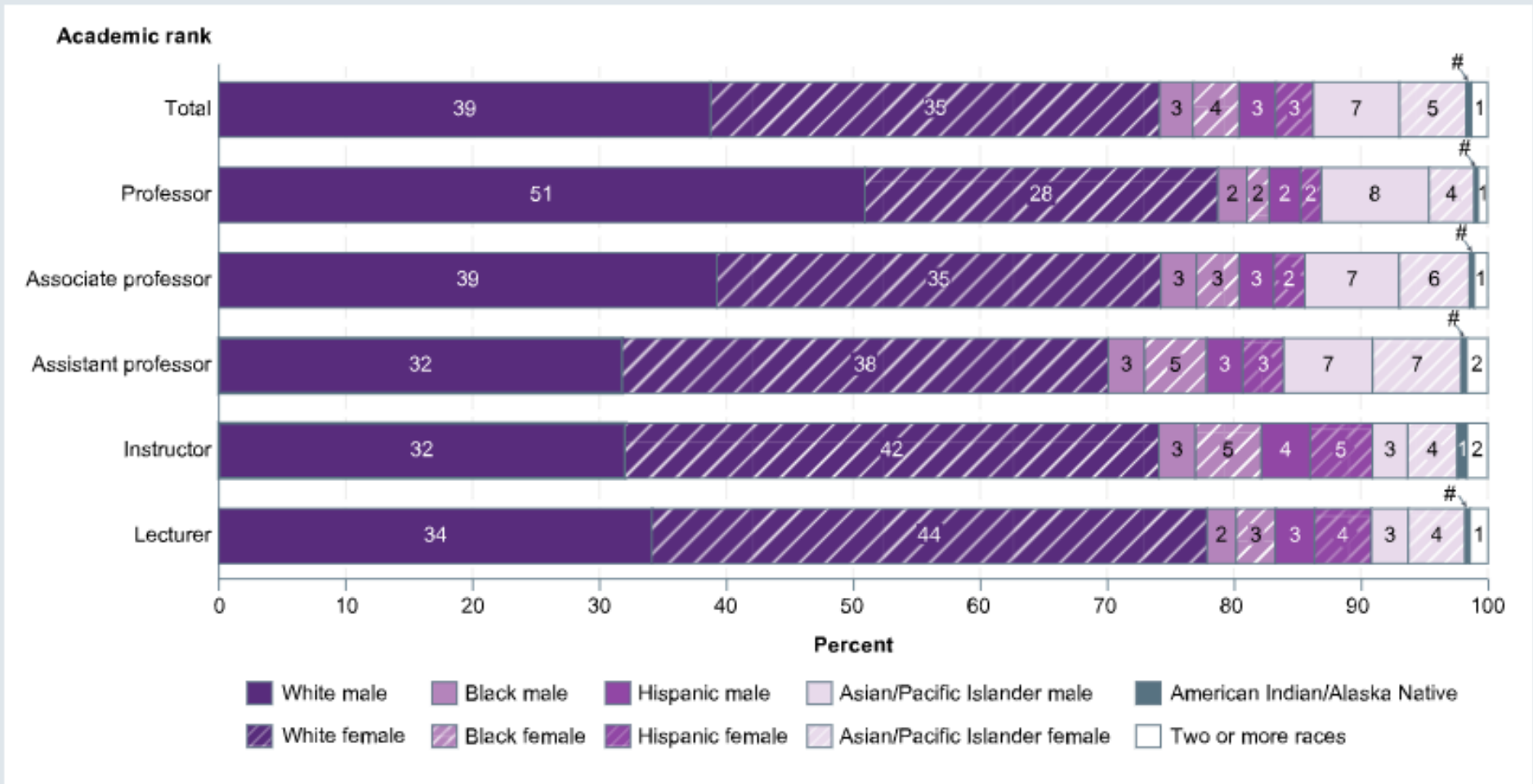


Source: 2022 AAUP Tenure Survey.

Note: Findings are from four-year institutions with a tenure system.

Diversity?

Figure 3: For each academic rank, percentage distribution of full-time faculty in degree-granting postsecondary institutions, by race/ethnicity and sex: Fall 2020

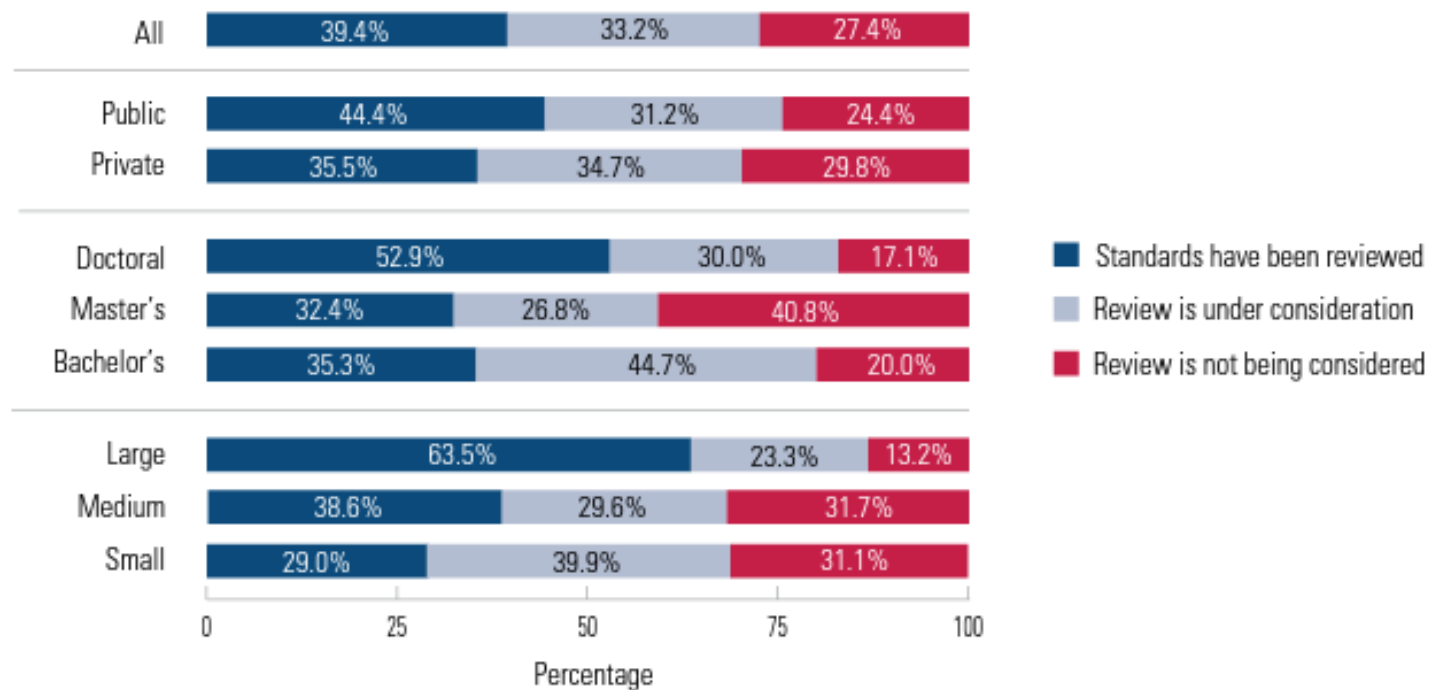


Rounds to zero.

Diversity?

FIGURE 5

Institutions where tenure standards have been reviewed for implicit bias



Source: 2022 AAUP Tenure Survey.

Note: Findings are from four-year institutions with a tenure system.

Large Change or Remove Tenure

- **Florida**
- **Georgia**
- **California**
- **South Carolina**
- **Iowa**
- **Wisconsin**
- ...

Who do you need to watch out for?

Who do you need to help?

You can put your answer on the [Workshop Google Doc](https://docs.google.com/document/d/1sCy0FQECDXy8EOqtlg6wqpOXrGOpRT0dp1f1PA7M-0c/edit)

<https://docs.google.com/document/d/1sCy0FQECDXy8EOqtlg6wqpOXrGOpRT0dp1f1PA7M-0c/edit>

- Assistant Prof
- Associate Prof
- Full Professor
- Chair
- Dean
- Director
- Endowed Prof
- Endowed Chair
- Emeritus Prof
- Regent
- Trustee
- Grad Assistant
- Instructor
- President
- Chancellor
- Provost
- Renewable Term Prof
- Adjunct Prof
- Research Prof
- VP, Research
- VP, Admin
- CIO