A DATA SNAPSHOT OF

ACS APPROVED INSTITUTIONS
Currently 699 programs are ACS Approved
Approved programs submit two types of forms
  ○ Annual Reports
  ○ Periodic Reports
Committee on Professional Training Surveys
Self-reported data
Aggregate data
APPROVED PROGRAMS

Highest Chemistry Degree Conferred

- Bachelor's, 55%
- Master's, 16%
- Doctorate, 29%

Carnegie Classifications

- BS/BA-Arts/Science
- BS/BA-Diverse
- MS-Large
- MS-Medium
- MS-Small
- PhD-R1
- PhD-R2
- PhD-R3
- Other

Percentage of ACS Approved Programs

- BS/BA-Arts/Science: 20%
- BS/BA-Diverse: 5%
- MS-Large: 25%
- MS-Medium: 10%
- MS-Small: 5%
- PhD-R1: 15%
- PhD-R2: 10%
- PhD-R3: 5%
- Other: 0%
GENDER DATA – 2020-21
BACHELOR'S DEGREE
RECIPIENTS

Data from >600 annual reports from ACS Approved Programs

National Data*
(nonbinary data not collected)

- Chemistry
  - Female: 53%
  - Male: 47%
- Biochemistry
  - Female: 54%
  - Male: 46%

GENDER DATA – 2020-21
GRADUATE STUDENTS

Data from 261 graduate programs

Snap shot of cohorts

National Data*
(nonbinary data not collected)
- Female - 40%
- Male - 60%

GENDER DATA - 2019-20 & 2020-21

FACULTY
FROM PERIODIC REPORTS

2020 & 2021 Periodic Report Data:
Gender n = 247

- Full Professors 38.8%
  Female 24.9%
  Male 74.9%
  Nonbinary 0.1%

- Associate Professors 24.3%
  Female 33.3%
  Male 66.7%
  Nonbinary 0.1%

- Assistant Professors 18.0%
  Female 39.6%
  Male 60.2%
  Nonbinary 0.1%

- Other (including adjuncts) 1.7%
  Female 41.8%
  Male 58.2%
  Nonbinary 0.2%

- Lab Coordinators 1.4%
  Female 57.1%
  Male 42.9%

- Instructional Faculty (Lecturers & Instructors) 15.8%
  Female 55.9%
  Male 43.6%
  Nonbinary 0.2%
Percentage of Women in the Academic Career Path


**Data from 257 approved programs and includes all assistant professors, not just first year faculty.
GENERAL CHEMISTRY
LECTURE & LAB - CONTENT DELIVERY

Face-to-face
Lecture: 19%
Lab: 35%

Hybrid
Lecture: 36%
Lab: 39%

Remote
Lecture: 45%
Lab: 25%

Data collected from 2021 annual reports (N = 650)

ORGANIC CHEMISTRY
LECTURE & LAB - CONTENT DELIVERY

Face-to-face
Lecture: 21%
Lab: 43%

Hybrid
Lecture: 35%
Lab: 36%

Remote
Lecture: 44%
Lab: 21%
BACHELOR'S DEGREE PLACEMENTS
2020-21
FROM PERIODIC REPORTS

- Unknown: 23.7%
- Graduate School: 22.4%
- Industry: 26.4%
- Professional School: 18.3%
- Unemployed: 6.4%
- Teaching: 2.8%
DOCTORATE: DEGREE PLACEMENTS

2019-20

FROM GRADUATE PROGRAM SURVEY
FIVE YEARS OF PLACEMENTS
95 PROGRAM RESPONSES
28 PROGRAMS HAD NO DATA

- All Postdocs: 46.5%
- All Industry: 38.4%
- Academics (non-postdoc): 15.2%
POSTDOC PLACEMENTS (46.5%)  
2019–20  
FROM GRADUATE PROGRAM SURVEY

The largest number of graduate student placements in academia are in faculty positions at primarily undergraduate institutions, followed by instructional faculty positions at research institutions.
INDUSTRY PLACEMENTS (38.4%)  
2019-20  
FROM GRADUATE PROGRAM SURVEY  

The largest number of students find employment in traditional industrial companies. 

- **Industry - 75%** including CROs, law firms, R&D 
- **Other - 11%** Includes: Business School, Family Business, Lab Admin, Healthcare 
- **Consulting - 3%** 
- **Government - 9%** 
- **Nonprofit - 2%**
ACADEMIC PLACEMENTS (15.2%) 2019-20
FROM GRADUATE PROGRAM SURVEY
INCLUDES 5 YEARS OF PLACEMENTS

Other includes
- Tutoring
- Adjuncts
- NMR technician
- Research staff
- Safety officer
- Technical staff

PUI 32%
Research Institution 13%
Instructional 20%
VAP 11%
K-12 Education 7%
2 Year College 9%
Academics, other 8%
FACULTY SALARIES
(9-MONTH, AVERAGES)

ACS data from 2020 & 2021 periodic reports (n = 247)

National data includes all fields, not just chemistry

FACULTY SALARIES
PUBLIC VS. PRIVATE

ACS data from 2020 & 2021 periodic reports (n = 247)

National data includes all fields, not just chemistry

GRADUATE STUDENT SUPPORT
2019-2020 GRADUATE PROGRAM SURVEY

- **TA** - Teaching Assistantship
- **RA** - Research Assistantship
- **FS** - Fellowship
- **TG** - Training Grant
- **Ind** - Industry funded fellowships, grants, or tuition remission programs
- **Internal FS** - Internally funded fellowships

Other Sources of Funding
- Corporate
- External Fellowship
- Fullbright
- HHMI
- International Support
- Military
- Project Assistantship
- Graduate Assistantship (Administrative)
- Self Support

**Graduate Student Support**
- **TA** 53.7% (88.4% for 1st year students)
- **RA** 29.2%
- **FS** 4.5%
- **TG** 1.2%
- **Internal FS** 7.9%
- **Industry** 0.6%

**n = 118**
GRADUATE STUDENT STIPENDS

2019-2020 GRADUATE PROGRAM SURVEY

Average TA stipend
$25,000
QUESTIONS?
THANKS
THANKS
THANKS
THANKS

Felicia Fullilove–Cashwell
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Education Division at ACS