Education and Employment of Biological and Medical Scientists 2011

Data from National Surveys

Howard H. Garrison
Kim Ngo
FASEB Office of Public Affairs

Contents 1/6: Click title to link to slide

- Graduate School Application
  - Graduate School Applications in Biological and Health Sciences
    [Slide 9]

- Graduate Records Examination (GRE) Scores
  - Mean Quantitative Scores of US Citizens and Permanent Residents Intending to Enroll in Biological and Health Sciences
    [Slide 11]

- Graduate School Enrollment
  - First Time, Full Time Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Citizenship/Visa Status
    [Slide 13]
  - First Time, Full Time Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Ethnicity (US Citizens and Permanent Residents Only)
    [Slide 14]
Contents 2/6: Click title to link to slide

- Graduate School Enrollment (continued)
  - Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Citizenship/Visa Status
    - US Citizens & Permanent Residents and Temporary Residents [Slide 15]
    - US Citizens & Permanent Residents Only [Slide 16]
    - Temporary Residents Only [Slide 17]
  - Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Ethnicity (US Citizens and Permanent Residents Only) [Slide 18]
  - Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Sex [Slide 19]
  - Full Time Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Mechanism of Support [Slide 20]

- NIH Trainees and Fellows
  - Pre-Doctoral and Post-Doctoral Positions on NIH Training Grants and Fellowships [Slide 22]

Contents 3/6: Click title to link to slide

- NIH Trainees and Fellows (continued)
  - Fellowship (F32) Applications Reviewed and Awarded [Slide 23]
  - NIH Spending on Training Grants and Fellowships [Slide 24]

- Doctorate Awards
  - Doctorate Degrees Awarded in the Biological and Medical Sciences by Citizenship/Visa Status [Slide 26]
  - Doctorate Degrees Awarded in the Biological and Medical Sciences by Ethnicity (US Citizens and Permanent Residents Only) [Slide 27]
  - Doctorate Degrees Awarded in the Biological and Medical Sciences by Sex [Slide 28]

- Academic Postdoctoral Appointments
  - Biological and Medical Sciences Postdocs by Citizenship/Visa Status [Slide 30]
Education and Employment of Biological and Medical Scientists: Data from National Surveys

Contents 4/6: Click title to link to slide
- Academic Postdoctoral Appointments (continued)
  - Biological and Medical Sciences Postdocs by Degree and Citizenship/Visa Status
    - US and Temporary Resident Postdocs with MD or PhD [Slide 31]
    - US Postdocs with MD or PhD [Slide 32]
    - Temporary Resident Postdocs with MD or PhD [Slide 33]
  - Biological and Medical Sciences Postdocs by Sex and Citizenship/Visa Status [Slide 34]
  - Biological and Medical Sciences Postdocs by Source of Support [Slide 35]
- Postdoctoral Appointments for Individuals with PhDs from US Institutions
  - Percent of US Biomedical PhDs with Postdoc 1-2 Years Post-PhD [Slide 37]
  - Percent of US Biomedical PhDs with Postdoc 3-4 Years Post-PhD [Slide 38]
  - Percent of US Biomedical PhDs with Academic Postdoc 1-2 Years Post-PhD [Slide 39]
  - Percent of US Biomedical PhDs with Academic Postdoc 3-4 Years Post-PhD [Slide 40]

Contents 5/6: Click title to link to slide
- Stay Rates of Foreign Doctorate Recipients from US Universities
  - Stay Rates for Temporary Residents with Life Science Doctorates [Slide 42]
- Employment Status of Individuals with PhDs from US Institutions
  - Employment of Biomedical Science PhDs by Sector of Employment [Slide 44]
  - Distribution of Biomedical Science PhDs by Sector of Employment [Slide 45]
  - Academically Employed Biomedical PhDs by Tenure Status [Slide 46]
  - Distribution of Academically Employed Biomedical PhDs by Tenure Status [Slide 47]
  - Percentage of U.S. Biomedical Science PhDs Holding Tenure or Tenure-Track Positions, Total [Slide 48]
Contents 6/6: Click title to link to slide

- Employment Status of Individuals with PhDs from US Institutions (continued)
  - Percentage of U.S. Biomedical Science PhDs Holding Tenure or Tenure-Track Positions 5-6 Years Post-PhD [Slide 49]

- Medical School Faculty Appointments
  - Medical School Faculty Members by Degree and Department Type [Slide 51]
  - Total and New Faculty 1970 to 2007 in U.S. Medical Schools [Slide 52]

- NIH Grant Applications and Awards
  - Average Age of First Time R01 Equivalent Investigators [Slide 54]
  - Number of Competing Awards (Including First R01) [Slide 55]
Graduate School Applications in Health and Biological Sciences

Source: http://www.cgsnet.org/

Graduate Records Examination (GRE) Scores
Mean Quantitative Scores of US Citizens and Permanent Residents Intending to Enroll in Biological and Health Sciences

Source: http://www.ets.org

* Data are for 4 years ending in reference date.

Graduate School Enrollment
Education and Employment of Biological and Medical Scientists: Data from National Surveys

First Time, Full Time Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Citizenship/Visa Status

Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Citizenship/Visa Status


Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments: U.S. Citizens and Permanent Residents Only

Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments Temporary Residents Only


Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Ethnicity (US Citizens and Permanent Residents Only)

**Total Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Sex**


**Full Time Biological and Medical Sciences Graduate Students in Doctorate Granting Departments by Mechanism of Support**

NIH Trainees and Fellows

Pre-Doctoral and Post-Doctoral Full-Time Positions Awarded on NIH Training Grants and Fellowships

Source: http://grants1.nih.gov/grants/award/award.htm
Fellowship (F32) Applications Reviewed and Awarded

Source: http://grants1.nih.gov/grants/award/award.htm

NIH Spending on Training Grants and Fellowships

Source: http://officeofbudget.od.nih.gov/UI/HistoricalBudgetRequests.htm
Doctorate Awards

Doctorate Degrees Awarded in the Biological and Medical Sciences by Citizenship/Visa Status

Doctorate Degrees Awarded in the Biological and Medical Sciences by Ethnicity (US Citizens and Permanent Residents Only)


Doctorate Degrees Awarded in the Biological and Medical Sciences by Sex

Academic Postdoctoral Appointments

Biological and Medical Sciences Postdocs by Citizenship/Visa Status

Biological and Medical Sciences Postdocs by Degree and Citizenship/Visa Status


Biological and Medical Sciences Postdocs by Degree and U.S. Citizens and Permanent Residents Only

Biological and Medical Sciences Postdocs by Degree: Temporary Residents Only


Biological and Medical Sciences Postdocs by Sex and Citizenship/ Visa Status

Biological and Medical Sciences Postdocs by Source of Support


Postdoctoral Appointments for Individuals with PhDs from US Institutions
Percent of US Biomedical PhDs with Academic Postdoc 1-2 Years Post-PhD

Source: http://sestat.nsf.gov/

Percent of US Biomedical PhDs with Academic Postdoc 3-4 Years Post-PhD

Source: http://sestat.nsf.gov/
Stay Rates of Foreign Doctorate Recipients from US Universities

Stay Rates for Temporary Residents with Life Sciences Doctorates

Source: http://orise.orau.gov/sep/pubs.htm
Employment Status of Individuals with PhDs from US Institutions

Employment of Biomedical Science PhDs by Sector of Employment

Source: http://sestat.nsf.gov/
Distribution of Biomedical Science PhDs by Sector of Employment

Source: http://sestat.nsf.gov/

Academically Employed Biomedical PhDs by Tenure Status

Source: http://sestat.nsf.gov/
Distribution of Academically Employed Biomedical PhDs by Tenure Status

Source: http://sestat.nsf.gov/

Percent of US Biomedical Science PhDs Holding Tenure or Tenure-Track Positions, Total

Source: http://sestat.nsf.gov/
Percent of US Biomedical Science PhDs Holding Tenure or Tenure-Track Positions 5-6 Years Post-PhD

Source: http://sestat.nsf.gov/

Medical School Faculty Appointments
NIH Grant Applications and Awards

Average Age of First Time R01 Equivalent Investigators

Source: http://grants1.nih.gov/grants/award/award.htm
For comments or questions, please contact Kim Ngo at kngo@faseb.org or call 301-634-7650.