Doctoral Career Beginnings: Findings from the 2008 SED

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Survey of Earned Doctorates

- Annual census of all individuals receiving research doctorates from U.S. institutions

- Conducted annually since 1957-58; cumulative database includes data back to 1920

- Response Rate
  - 92% response rate in each of those years
Doctorates awarded by U.S. colleges and universities, 1957-2008

# of doctorate recipients

SED Data Used in Presentation

**Postgraduation Plans**
- Definite commitments for coming year (or not)
- Employment vs. postdoc
- Sector of employment
- Location of employment
- Salary

**Demography & Education**
- Broad field of degree
- Gender
- Race/ethnicity
- Citizenship at time of Ph.D.
Relationships Among Postgraduation Plans Data

- respondent
  - No definite commitments in coming year
  - Definite commitments in coming year
    - Definite commitments for postdoc
    - Definite commitments for employment
      - Employment sector (U.S.)
      - U.S. location
      - Foreign location
    - Salary
  - Academe
  - Industry
  - Government
  - Other
Postgraduation status of doctorate recipients by field of study, 1986-2006

% with definite commitments for employment or postdoc

Postgraduation status of doctorate recipients by field of study, 1986-2006 plus 2008

Postgraduation status of doctorate recipients by selected demographic groups, 1986-2006

% with definite commitments for employment or postdoc

Postgraduation status of doctorate recipients by selected demographic groups, 1986-2006 and 2008

Postgraduation plans of doctorate recipients by field of study, 1986-2006

NOTE: Percentages are based on the number reporting definite commitments for employment or postdoc.

Postgraduation plans of doctorate recipients by field of study, 1986-2006 and 2008

NOTE: Percentages are based on the number reporting definite commitments for employment or postdoc.

U.S. Employment sector of S&E doctorate recipients by field of study, 1986-2006 and 2008

NOTES: Percentages are based on the number reporting definite commitments for U.S. employment to a sector. The “Other” sector includes employment in elementary/secondary schools and non-profit organizations.

Employment sector of doctorate recipients by sex and by citizenship status, 2008

NOTES: Percentages are based on the number reporting definite commitments for U.S. employment to a sector. The “Other” sector includes employment in elementary/secondary schools and non-profit organizations.

NOTES: Percentages are based on the number of temporary visa holders reporting definite commitments for employment or postdoc with responses to location (U.S. or foreign).

Postgraduation location of temporary visa holders with definite commitments by field of degree, 2008

% with definite commitments for employment or study in U.S.

- Life sciences: 65.3%
  - Employment: 15.7%
  - Postdoc: 49.6%
- Physical sciences: 44.2%
  - Employment: 38.4%
  - Postdoc: 5.8%
- Social sciences: 16.1%
  - Employment: 45.0%
  - Postdoc: 56.2%
- Engineering: 28.6%
  - Employment: 43.7%
  - Postdoc: 56.0%
- Education: 14.0%
- Humanities: 13.4%

NOTES: Percentages are based on the number of temporary visa holders reporting definite commitments for employment or postdoc with responses to location (U.S. or foreign).

New item in 2008 SED: Basic Annual Salary for principal job in the next year

• Salary data currently under review

• Sample data tables under consideration:
  o Salary (academic sector versus industry sector) by field of study
  o Salary (in academic sector) by field of study and by gender
  o Salary (in academic sector) by field of study and by race/ethnicity
  o Salary of postdocs by field of study
(near) Future of the SED

• New data access and reporting
  o Data enclave
  o REG Tables and new disclosure protection approach
  o New electronic access to summary tables

• New data collection procedures
  o Web transition pilot
  o Hybrid SED/ExitSurvey pilot

• New data items
  o Exploring collection of impressionistic data
  o Data user workshops, experts panels

We need your help . . . please contact us if interested
Related Developments

• International Survey of Doctorate Recipients (ISDR)
  - Tracking overseas respondents
  - Conducted feasibility and pilot of ISDR
  - Module will become a permanent feature of SDR in 2010

• Higher Education R&D (HERD) Survey (formerly Academic R&D)
  - Major redesign underway (pilot now in field); will include new items:
    - composition of the R&D
    - proposals & awards
    - clinical trials
    - multi disciplinary research
  - Next will be the development of methods to obtain data on technology transfer/IP, economic development, and R&D personnel
• Postdoctorate Data Collection System
  o Collecting data on U.S. degreed postdoc’s will be relatively easy
  o Foreign degreed postdoc’s will be difficult unless we get access to the H1B and SEVIS lists
  o Intend to collect SDR type data for postdoc’s in all sectors and fold the respondents into the SDR longitudinal sample
  o Testing whether aggregate data on postdoc’s can be collected from the graduate deans in a pilot this fall
For further information on the SED:

- Doctorate Recipients from U.S. Universities: Summary Report 2007-08

- 2008 SED data release InfoBrief: