



# Postdoc Data Project (PDP)

Emilda B. Rivers

A Synergistic Model: A Postdoc Office within  
the Graduate School

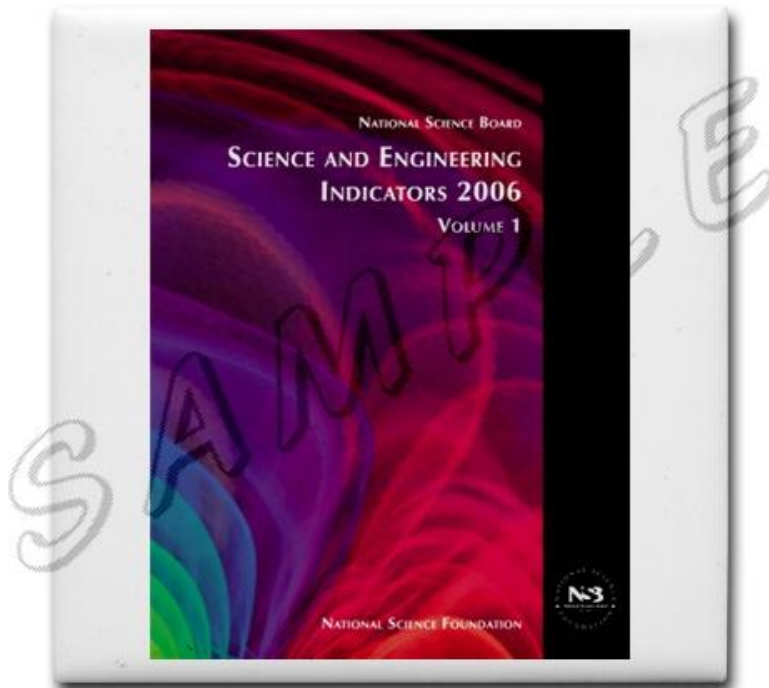
Council of Graduate Schools

December 7, 2007

**National Science Foundation  
Division of Science Resources Statistics**

**[www.nsf.gov/statistics](http://www.nsf.gov/statistics)**

# Division of Science Resources Statistics (SRS)



## Federal Statistical Agency

**Fulfills the legislative mandate  
of the National Science  
Foundation Act to...**

- *Provide a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources, and*
- *Provide a source of information for policy formulation by other agencies of the Federal Government. . .*



# PDP Impetus

Unknown implications for the U.S. research enterprise, U.S. workforce, and science and engineering (S&E) employment markets due to the increasing ...

- Number of total postdocs
- Duration of postdoc appointments
- Number of non-U.S. citizens in postdocs



# PDP Goals

- Improve aggregate counts of postdocs
- Develop a comprehensive integrated postdoc information strategy



# SRS postdoc-related surveys

- **GSS, the Survey of Graduate Students and Postdoctorates in Science and Engineering**

An annual establishment survey of U.S. academic institutions at the department level that provides a major source of counts about postdocs

- **SED, the Survey of Earned Doctorates**

An annual census of newly granted research doctorates from U.S. institutions about their postgraduation plans at the time of graduation

- **SDR, the Survey of Doctorate Recipients**

A sample survey of research doctorates from the SED conducted biennially and as a longitudinal survey

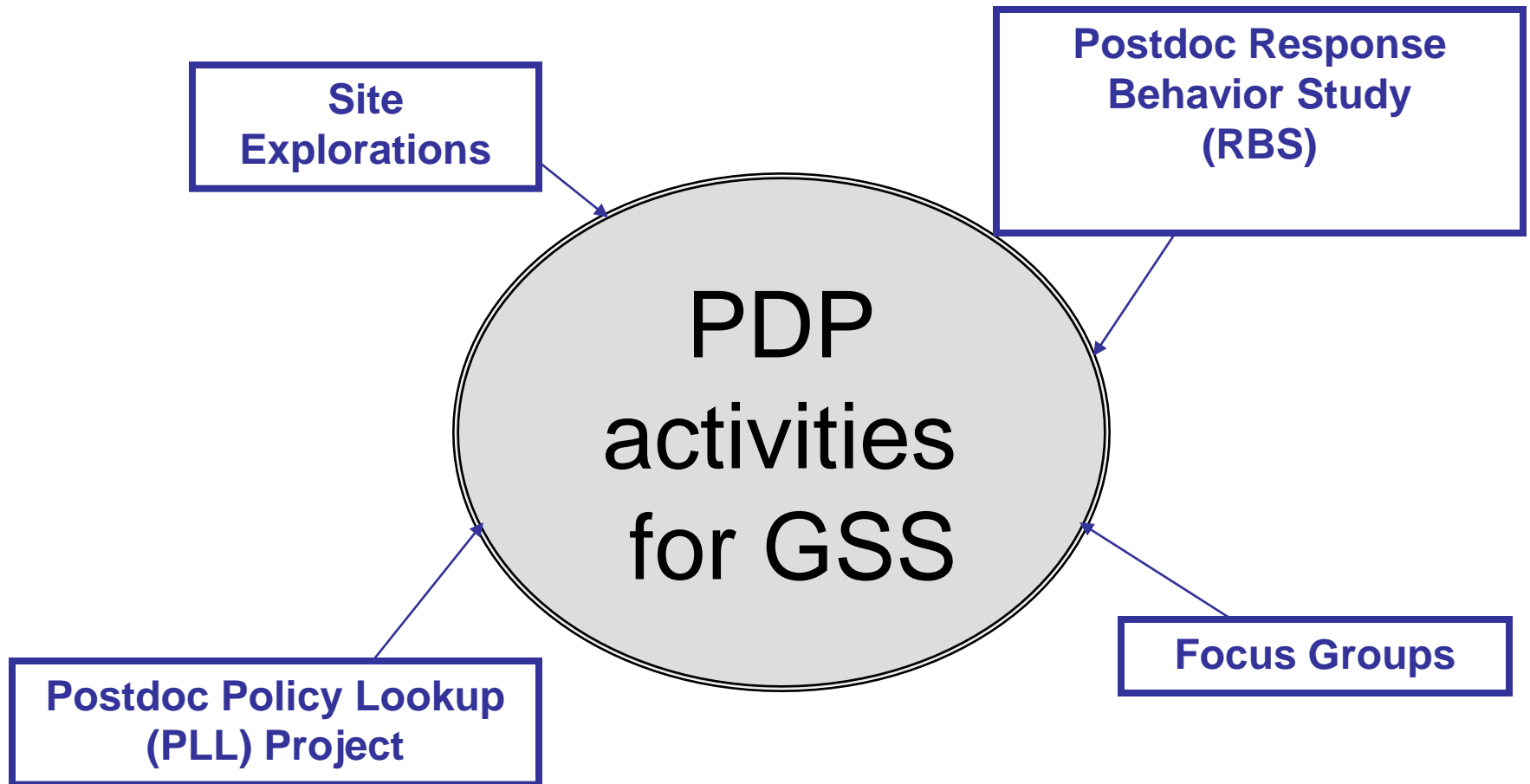
- **NSCG, National Survey of College Graduates**

A sample survey designed to provide data on the number and characteristics of individuals with degrees and/or employment in S&E in the U.S

# How GSS data are collected

- Confirm contact information
- Identify new or defunct departments/programs/centers with graduate students or postdocs
- Request survey data for eligible departments/programs/centers







# RBS Questions

- Are respondents knowledgeable about both postdocs and graduate students?
- What resources do the respondents rely upon to provide a response?
- How are the data organized?
- How do respondents translate definitional issues in their response?



# RBS Findings

- Knowledgeable person about postdocs usually not the respondent providing postdoc data
- Postdoc definitions vary widely within and across institutions
- Potential problems with identifying new or defunct departments/programs/centers with graduate students or postdocs



# Postdoc Policy Lookup (PPL) Project

- Project started with search for definitions, but discovered the need to include policies
- Many institutions have neither a policy or a definition
- The difference between having a policy and using a policy is important
- Selected a random sample of 108 RBS institutions, examined by response to having a policy
- Found inconsistencies about having a policy

# PPL Findings

| Policy (RBS )          | Sample Size | Website Review - Didn't find a policy | Website Review - Found a policy |
|------------------------|-------------|---------------------------------------|---------------------------------|
| Yes                    | 25          | 17                                    | 8 (32%)                         |
| No                     | 25          | 23 (92%)                              | 2                               |
| Inconsistent responses | 33          | 19 (58%)                              | 14                              |
| Don't know             | 25          | 22 (88%)                              | 3                               |



# Focus Groups Findings

- Variation within academic institutions regarding postdoc policies, definitions, and record-keeping
- Typically two definitions exist for postdocs within an institution: a functional definition and a policy definition
- New initiatives are developing in academic institutions for supporting and documenting postdocs
- Postdoc data records do not typically include information about foreign degrees or funding sources



# Site Explorations Findings

- Institutions are in flux with respect to postdoc policies and record-keeping
- A single individual cannot always provide all of the postdoc information
- Apparent split between individuals with knowledge on the policies and definitions and individuals with the ability to provide actual data about postdocs
- Information about counts of postdocs by foreign-degree status and degree type not available from either academic or non-academic institutions



# Differences that Postdoc Offices Make

- Respondents suggested that an individual from a centralized Postdoc Office would provide better quality data on postdocs than the current GSS department-level respondent
- Respondents in institutions with a postdoc office indicate a positive perception of their survey data quality
- Institutions with Postdoc Offices are more likely to have formal postdoc policies than institutions without Postdoc Offices



# Next Steps

Future GSS postdoc data-related efforts should focus on identifying the best respondent for postdoc data

- Postdoc offices appear to be a key starting point for this exploration
- Knowledge of postdoc policies, as well as knowledge and accessibility of data sources, should be explored as a way to quickly identify the correct postdoc reporting individual