

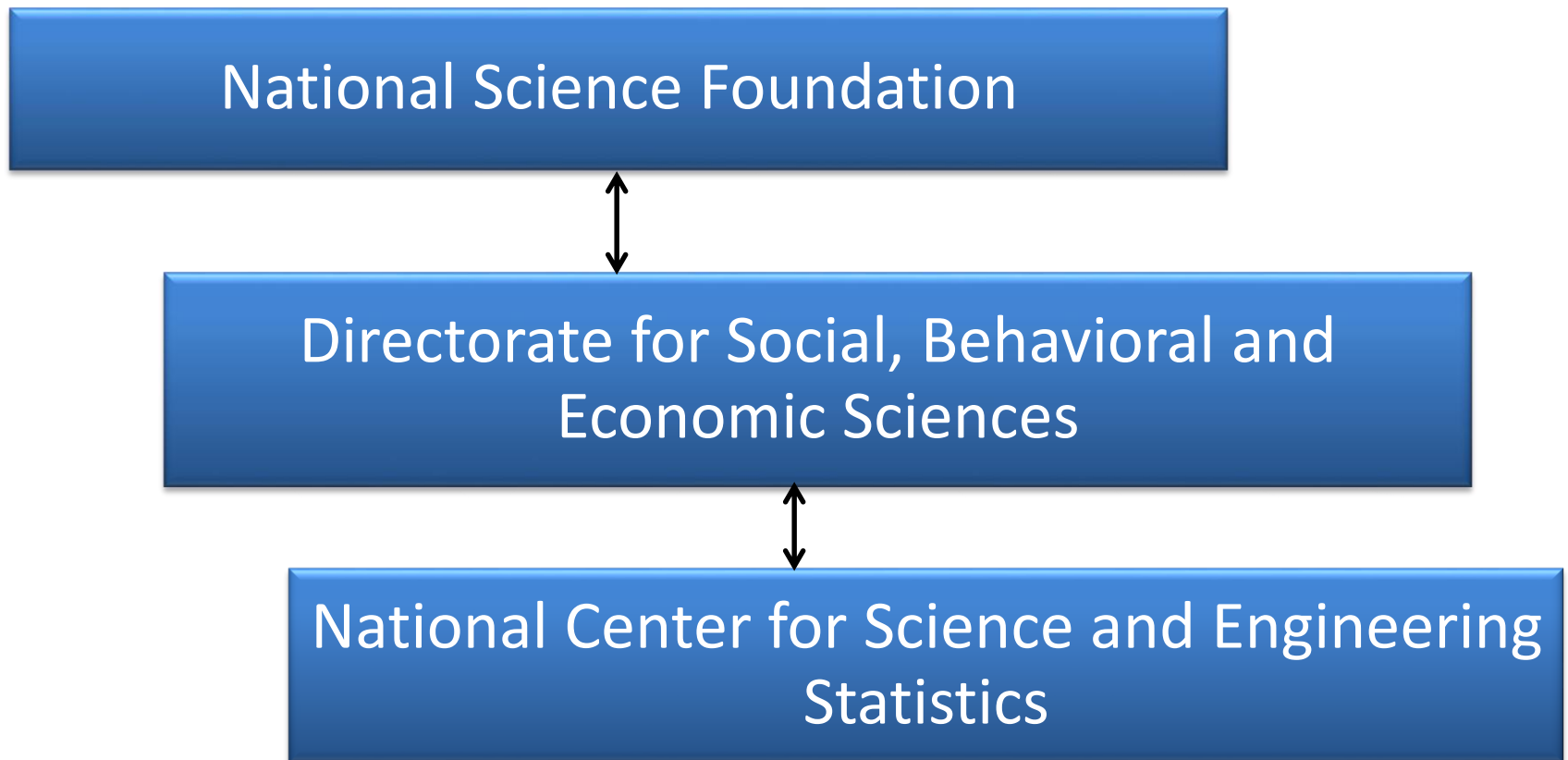


Early Career Doctorates Survey

Emilda B. Rivers
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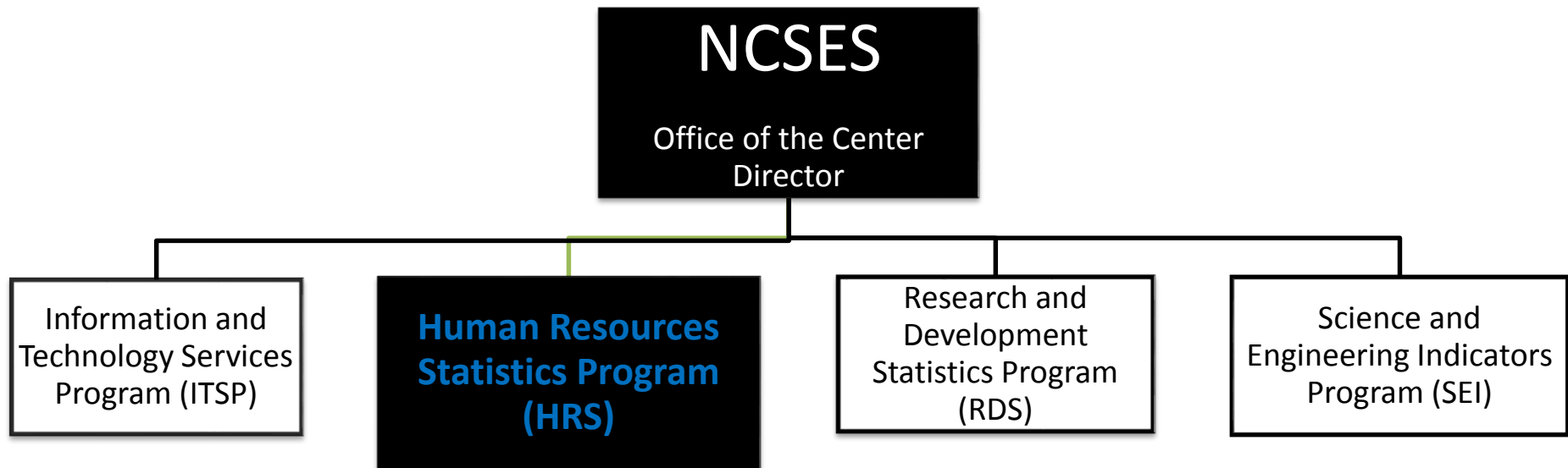
Association of Public Data Users 2015 Annual Conference
Innovating with Public Data
September 2, 2015

Organizational Placement of NCSES



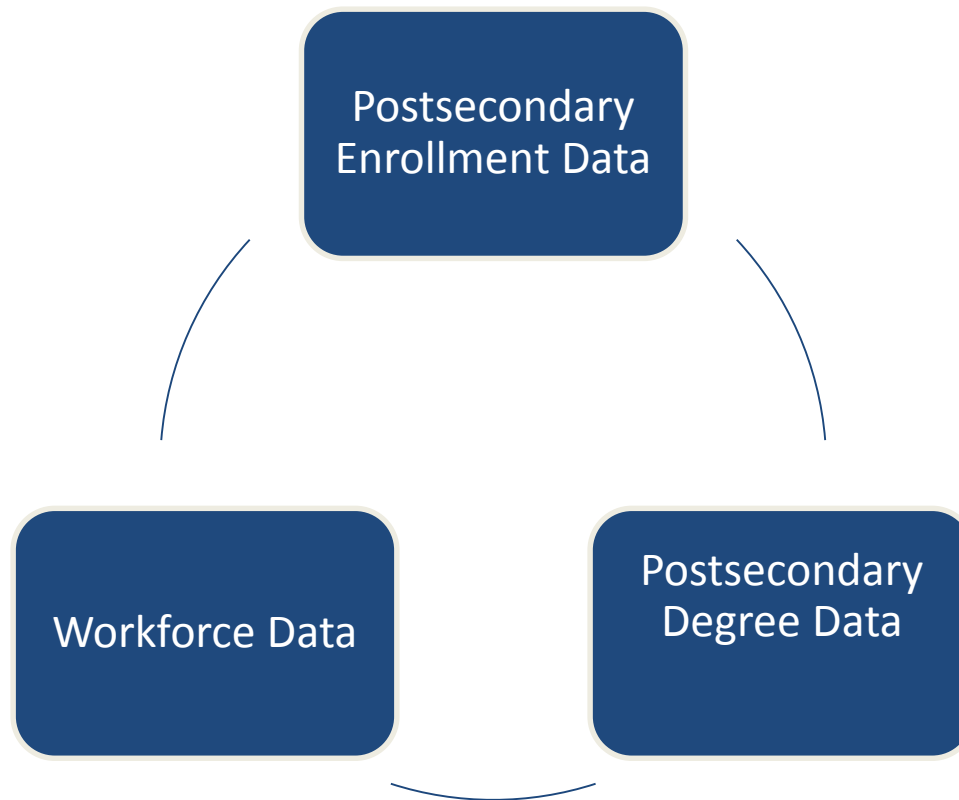


National Center for Science and Engineering Statistics (NCSSES)





HRS Focus: Science, Engineering, and Health (SEH)



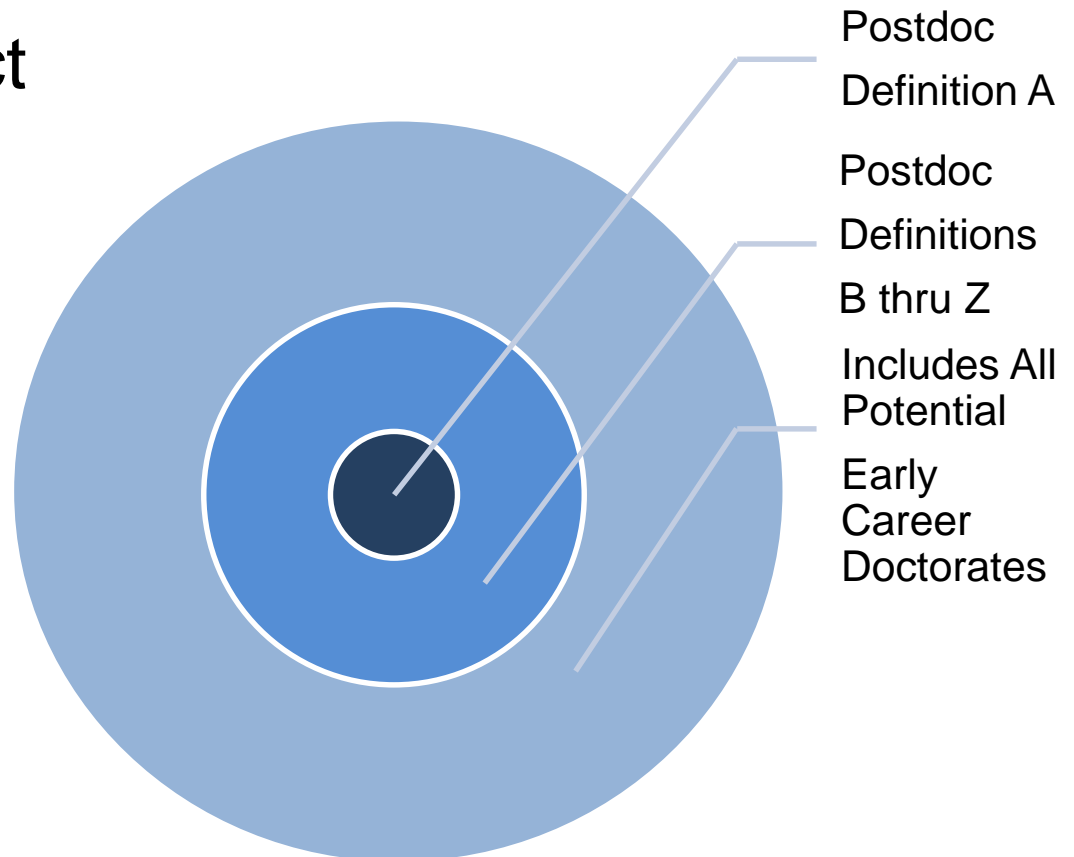
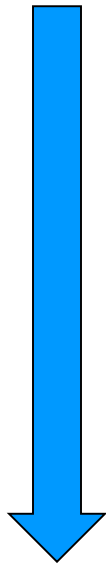
How does achievement in one stage relate to the other stages?

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

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

From Postdocs to Early Career Doctorates

Postdoc Data Project



Early Career Doctorates (ECD) Project

Early Career Doctorates Survey



A national survey to gather in-depth information about U.S. and non-U.S. degreed recent doctorate recipients during the first 10 years of their working careers.

The focus is on transition to the labor market and early-career employment patterns and characteristics.



Selected ECDS Data Items

Employment

- First position after earning doctorate
- Current position
- Future plans

Current Position

- Professional activities
- Compensation and benefits
- Professional vs personal life balance
- Mentoring

Experiences

- Amount of training and guidance
- Opportunities to conduct independent research
- Pathway issues and career transitions

Expected Uses of ECDS

- Population and Employment Statistics
 - ECD counts by sector, discipline, degree type, degree source, compensation, and benefits

Monitor trends in the number, type, and status of ECD to inform policy decisions

- ECD Quality and Experience Indicators
 - Amount of training and guidance; opportunities to conduct independent research and author publications

Understand the extent to which ECD research funding is effectively contributing to the goal of enhancing the quality of the S&E workforce

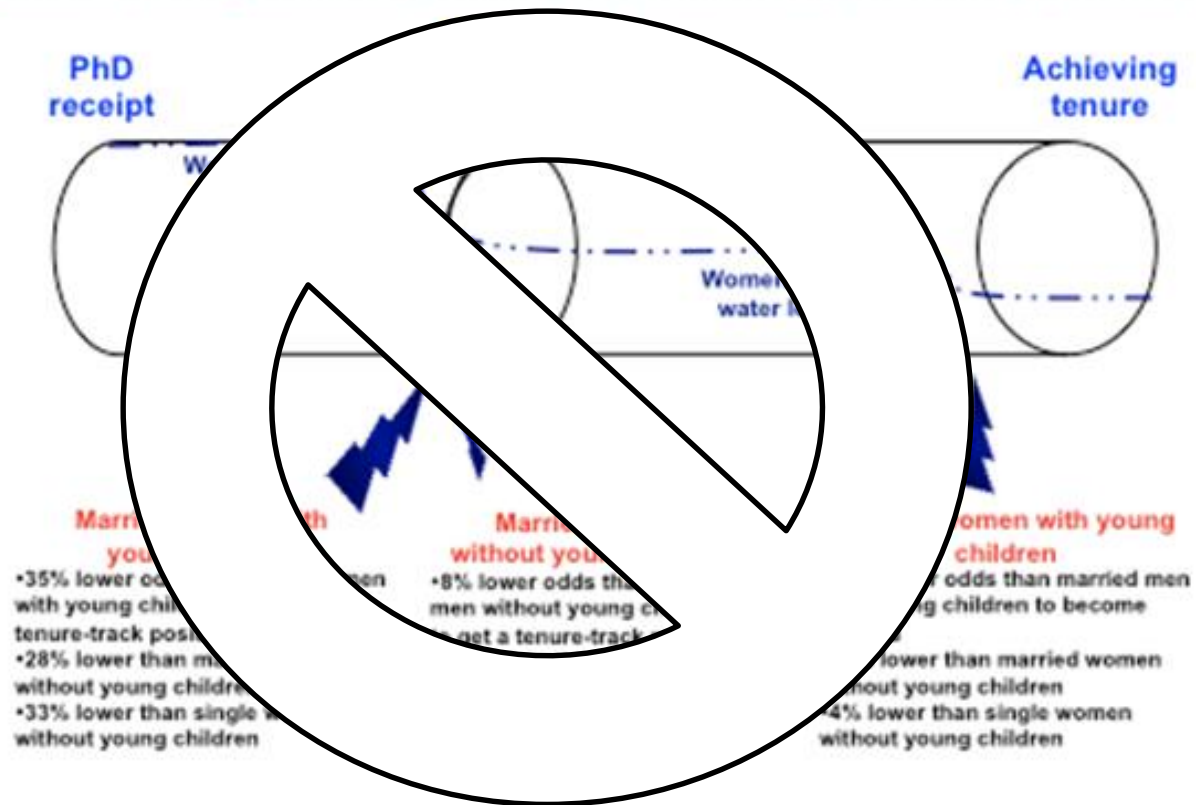
Expected Uses of ECDS

- Career Transitions
 - Longitudinal information regarding career aspirations, career progression, and career outcomes

Understand the linkage between early career experiences, particularly postdocs, and longer-term career achievements

Pipeline to Tenure

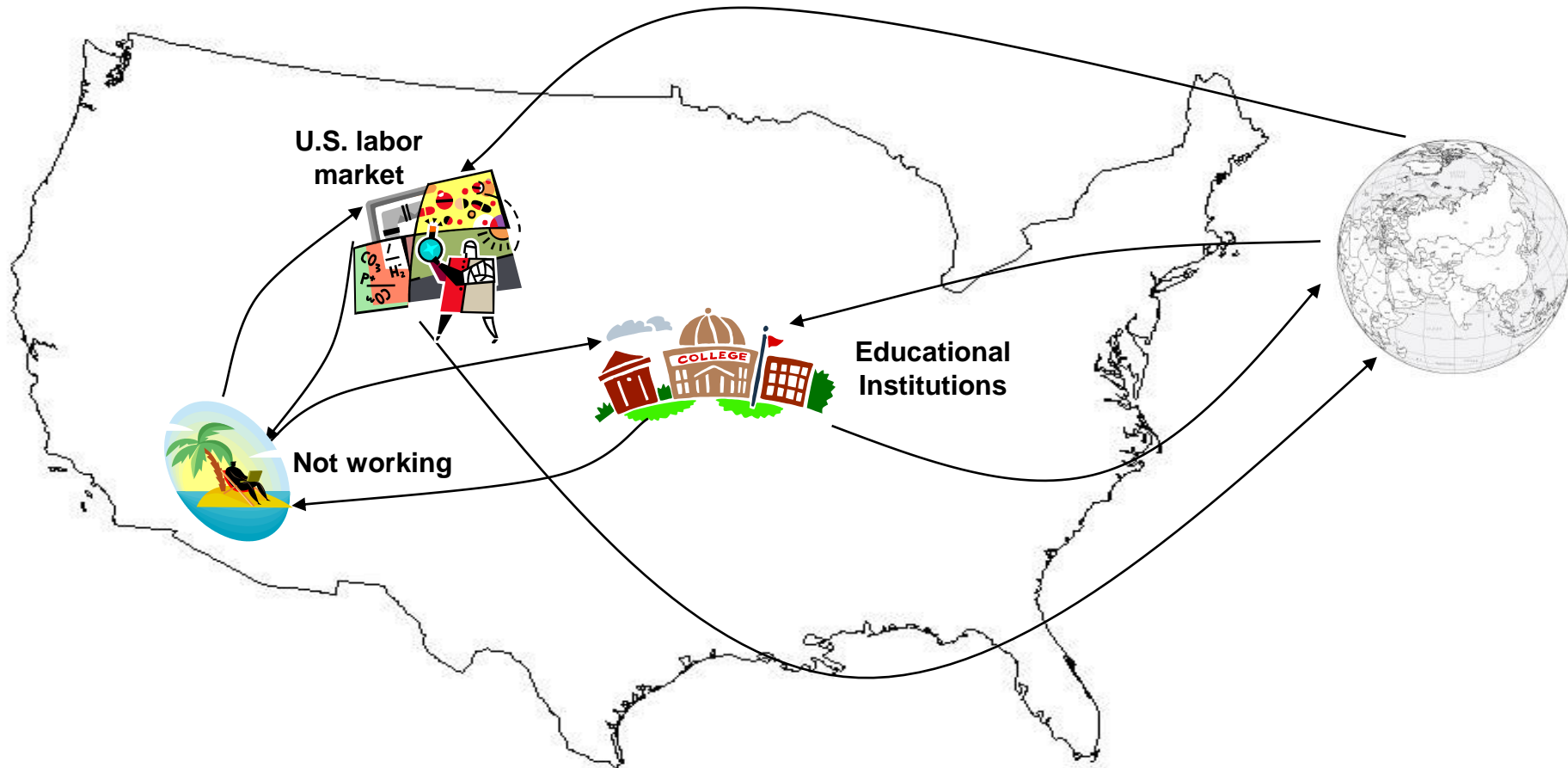
Leaks in the Pipeline to Tenure for Women PhDs in the Sciences*



*Results are based on survival analysis of the Survey of Doctorate Recipients (a national biennial longitudinal data set funded by the National Science Foundation and others, 1981 to 2003) in all sciences, including social sciences. The analysis takes into account discipline, age, ethnicity, PhD calendar year, time-to-PhD degree, and National Research Council academic reputation rankings of PhD program effects. For each event (PhD to TT job procurement, or TT job to tenure), data are limited to a maximum of 16 years. The waterline is an artistic rendering of the statistical effects of family and gender. Note: The use of NSF Data does not imply the endorsement of research methods or conclusions contained in this report. Person-year N for entering tenure track=140,275. Person-year N for achieving tenure=46,883.

Flows and Pathways

There is no distinct pipeline – education and career movement is better described as flows and pathways.





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