Tracking Graduate Student Outcomes

Council of Graduate Schools
March 16, 2011

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Annual follow-up survey of new degree recipients

PhD +10 Project
Follow-up Survey

The methodology has evolved over time

Established infrastructure

Have our own servers
HTML and Perl programmers
Email software
Valuable resources
Each target population gets a survey customized to their degree level and broad field.

Survey instruments utilize question response branching or “build a survey”

There are no paper versions of the questionnaire
Promise:

Confidentiality (not anonymous)

No identifiable information

Secure data

To both the department and the degree recipient
### LAST YEAR'S PHYSICS DOCTORATE RECIPIENTS (SEPT. 2009 - AUG. 2010)

Please make sure that the number of PhDs listed here matches the total number of PhDs indicated in Section C. on the Enrollments and Degrees questionnaire. If you already have lists available in another format, please feel free to use them. Make additional copies of this form if necessary.

<table>
<thead>
<tr>
<th>DEGREE RECIPIENT</th>
<th>ADDRESS</th>
<th>EMAIL</th>
<th>ADVISOR LAST NAME</th>
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FERPA (The Family Educational Rights and Privacy Act)

Directory information

Send formal letter outlining intent and confidentially statement.

Send a FERPA law link
Population survey
Class of 2009

<table>
<thead>
<tr>
<th>Degree</th>
<th>Count</th>
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<tbody>
<tr>
<td>Physics Master’s</td>
<td>838</td>
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<tr>
<td>Physics PhDs</td>
<td>1,554</td>
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<tr>
<td>~280 Departments</td>
<td></td>
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<tr>
<td>Astronomy Master’s</td>
<td>29</td>
</tr>
<tr>
<td>Astronomy PhDs</td>
<td>141</td>
</tr>
</tbody>
</table>

Degree granting physics and astronomy departments

Long standing departmental relationships

The physics and astronomy community is our largest data user.
The information is used extensively

Career information
- Field of employment
- Salaries
- Postdoc issues
- Subfield mobility
- Skills

Other issues
- Time to degree
- Country of origin – leave US
- Satisfaction questions
- Many others
Time line

**October**: Request name and contact information from the departments

**February/March**: Start contacting degree recipients
- Pre-notice (email)
- 3 email invitations
- Postal invitation

**April**: Start contacting Advisors
- 2 advisor email contacts
- Advisor phone contact

**Late May**: Final email invitation
Dear <First Name> <Last Name>,

<Institution Name>

Each year the American Institute of Physics conducts a follow-up study of recent PhD recipients. Our project goal is to accurately reflect the initial employment outcomes of physics and astronomy PhDs from the class of 2009-10 and to track changes in these initial outcomes over time.

Please take a few minutes to complete the form at the link below. The information we collect will serve as an important resource for current students, degree recipients, employers and faculty.

https://aipsurveys.aip.org/cgi-bin/phdsurvey.pl?id=1212121212

Your response will be kept confidential, and will only be published in aggregate form. If you have any questions or comments about the study, I would be happy to talk with you.

Thank you very much for your help with this important project. The link above will also lead you to our website where you can see the findings from previous follow-up studies.

Sincerely,
Patrick Mulvey
Lead Research Associate
American Institute of Physics
301-209-3076

PS. If you were not a recent PhD recipient in the class of 2009-10, please go to the link and check the appropriate box. We will update our records.
Advisor Contact

6 Quick questions they can answer
- Subfield
- Type of employment
- Sector of employment and name of employer
- Residing in or out of the US
- Citizenship
- Sex

Request for current contact information
Response rates

VS

Coverage rates
PhD +10 Project
Career Development Survey

Physics PhD Classes of:

Currently in the field
2 huge challenges

Developing a Comprehensive Questionnaire

Finding Contact Information
Started with existing lists gathered for the follow-up survey.

Updated contact information from respondents.
Member Society membership lists

- Fast and inexpensive

- Skewed toward academe
Advisors

Not all advisors maintained contact with their advisee.
Update Postal Addresses

- Need an initial address
- Degree recipient needs to have filed a forwarding order with the post office.
- Time sensitive

- Inexpensive
Web Searches
- Very time consuming
  - 5-6 names per hour
  - Numerous resources
- False matches
- Skewed toward academe
Utilization of Classmates

- Very labor intensive, “hints”
- Left the country
- Deceased
- Name change
Results

- Different approaches yielded different gains
- Currently ~35% coverage rate
- Efforts are ongoing
Going forward we will conduct an annual address update.
www.aip.org/statistics

pmulvey@aip.org