2014 IUPUI Graduate Alumni Survey

Summary of Results – School of Science

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<u>PURPOSE</u>: To measure indicators related to current alumni employment, satisfaction with experiences at IUPUI, effectiveness of IUPUI on learning, further education, and connection to IUPUI.

<u>METHODS</u>: Survey administered to graduate student alumni who graduated from Fall 2011 to Spring 2014 for which the Office of Alumni Relations had up-to-date contact information. All graduates from Summer 2014 were included in the sample.

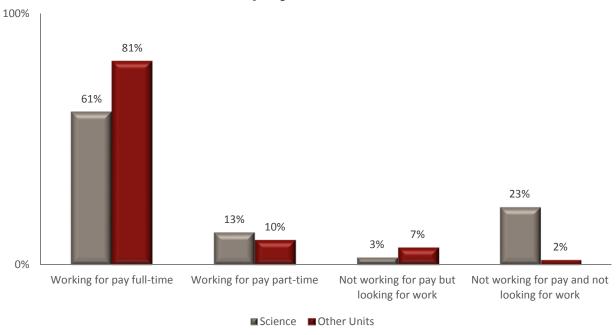
RESPONDENT CHARACTERISTICS:

| | Science | Invited from | All | |
|---------------|-------------|--------------|-------------|-------------|
| | Respondents | Science | Respondents | All Invited |
| Female | 44.4% | 47.2% | 58.7% | 57.7% |
| Male | 55.6% | 52.8% | 41.2% | 42.3% |
| White | 51.4% | 50.6% | 69.3% | 66.5% |
| Black | 5.6% | 2.9% | 6.8% | 6.3% |
| Hispanic | 0.0% | 1.4% | 1.1% | 1.8% |
| Asian | 4.2% | 10.8% | 4.2% | 5.9% |
| Other | 0.0% | 0.7% | 0.2% | 0.6% |
| International | 37.5% | 32.5% | 16.0% | 15.4% |
| Refused | 0.0% | 1.1% | 2.4% | 3.5% |
| N | 72 | 443 | 938 | 5291 |
| Response Rate | 16% | | 19% | |

- Demographics of the alumni respondents from the School of Science are similar to those of the sample.
- School of Science respondents are more likely to be male compared to other units on campus.
- The School of Science has more international students compared to other units.
- 10% of Science alumni respondents also attended IUPUI for their undergraduate degree.

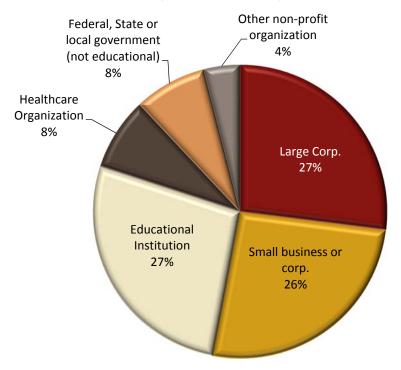
Section 1: Employment

Figure 1: Employment Status



- Just under three quarters (74%) of all School of Science graduate student alumni are working either full-time or part-time.
- Even though a larger amount of Science graduate students report not working for pay and not looking for work, almost all of these alumni are currently enrolled in another program leading to a degree.
- Nearly two-thirds (65%) of those currently working are employed in Indiana.

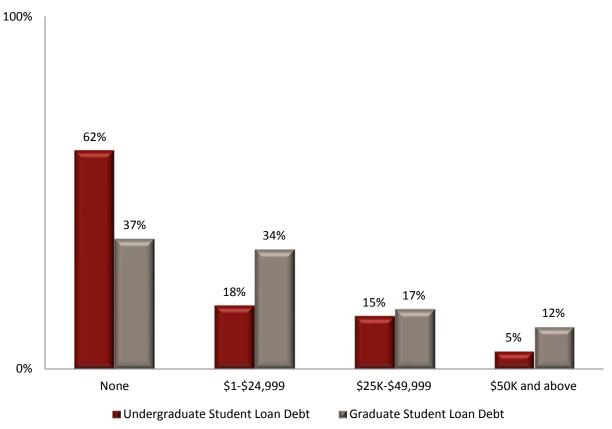
Figure 2 Type of Employer



- Over three quarters of recent Science graduate student alumni (80%) are evenly split between working for a large corporation (27%), a small business or corporation (26%), and an educational institution (27%)
- The majority of respondents (70%) report that their current job is directly related to their major, while the large majority (88%) say it is at least somewhat related.
- The majority of graduate student alumni (73%) also agree with the statement, "The job I have is the job I want."
- Approximately half of respondents report that their School of Science education prepared them for their current job very well (48%), while slightly less than half agree that it enhanced their prospects for career advancement (45%) very well.
- The large majority believe their School of Science education assisted them with preparation for their job and enhancing their prospects for career advancement at least somewhat at rates of 84% and 92% respectively.
- Less than two thirds of science graduate student alumni respondents (65%) have an annual salary of at least \$40,000 which is less than other units where this is true for 75% of alumni. However, when you remove students who are enrolled full-time in a program leading to a degree this percentage rises to 82% for School of Science alumni. The majority currently have an annual salary between \$40,000 \$59,000 (32%) or \$60,000 \$79,999 (34%).

Section 2: Student Loan Debt

Figure 3: Student Loan Debt (from all sources)



- Almost two thirds of Science alumni (62%) report having no debt related to their undergraduate degree while this is true for only 37% of alumni regarding their graduate degree.
- A larger percentage of students have student loan debt up to \$24,999 related to their graduate degree (34%) compared to their undergraduate student loan debt (18%).
- Only 12% of graduate alumni from the School of Science have \$50,000 or more debt related to their graduate degree which is less compared to other units (33%) on campus.
- Roughly 9% of Science alumni state that they are not at all confident that they will be able to pay off their student loans on time which is significantly less than students from other units (22%).
- The large majority (85%) of the School of Science alumni are at least somewhat confident they will be able to pay off their student loans on time.

Section 3: IUPUI Experience

Table 1
Satisfaction with Academics, Instruction, and the Learning Environment ^a

| Please indicate how satisfied you are | · | <u> </u> | g _ | | |
|--|----------------------|--------------|------------|-------------------|------|
| with each of the following aspects of your IUPUI experience. | Very Dissatisfied | Dissatisfied | Satisfied | Very Satisfied | Mean |
| | Percentages | | | | |
| Overall quality of your academic experiences at IUPUI | 1% | 6% | 64% | 29% | 3.21 |
| Your social experiences at IUPUI | 3% | 17% | 65% | 15% | 2.93 |
| Quality of teaching by faculty in your major area | 1% | 14% | 39% | 46% | 3.29 |
| Quality of advising or mentorship | 6% | 15% | 56% | 24% | 2.97 |
| Quality of courses in your major area | 7% | 21% | 42% | 31% | 2.96 |
| Personal attention from those in your major department | 7% | 10% | 52% | 31% | 3.07 |
| Opportunities for community engagement (projects, research, exhibitions, etc.) | 7% | 21% | 50% | 21% | 2.86 |
| Opportunities to participate in faculty members' research | 7% | 14% | 49% | 30% | 3.01 |
| Opportunities to participate in personal research | 6% | 16% | 49% | 29% | 3.01 |
| Consultations about thesis, dissertation, or creative project. | 7% | 7% | 62% | 23% | 3.01 |
| General helpfulness of faculty | 1% | 6% | 58% | 35% | 3.26 |
| Tutoring and other academic support services | 0% | 7% | 72% | 21% | 3.13 |
| Use of technology in the classroom | 0% | 7% | 61% | 32% | 3.25 |
| The extent to which faculty and staff helped you become oriented to your program | 4% | 10% | 63% | 24% | 3.15 |

^a 1 = Very Dissatisfied, 2 = Dissatisfied, 3 = Satisfied, 4 = Very Satisfied

- The large majority (93%) of Science graduate student alumni respondents are satisfied or very satisfied with the overall quality of their academic experiences.
- The lowest satisfaction is in regards to opportunities for community engagement. However, this was not significantly different than other units at IUPUI.
- School of Science alumni respondents (79%) are significantly more likely than other units (63%) to be satisfied with their opportunities to participate in faculty member's research.

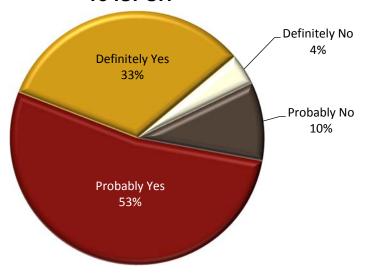
Table 2
Satisfaction with Co-Curricular Experiences and Other Services ^a

| Please indicate how satisfied you are with each of the following aspects of your IUPUI experience. | Very Dissatisfied | Dissatisfied | Satisfied | Very Satisfied | Mean |
|---|----------------------|--------------|-----------|-------------------|------|
| | Percentages | | | | |
| Opportunities to develop appreciation for diversity (outside speakers, programs, films, book discussions, etc.) | 4% | 10% | 63% | 24% | 3.06 |
| Opportunities to develop leadership skills (in class) | 4% | 13% | 67% | 16% | 2.94 |
| Opportunities to develop leadership skills (outside the classroom) | 4% | 25% | 58% | 13% | 2.80 |
| Opportunities for career development (externship, job shadowing, career workshops, internships, etc.) | 12% | 28% | 40% | 21% | 2.69 |
| Opportunities to participate in international activities on campus (participating in courses or programs with international students, using the global classroom, etc.) | 9% | 18% | 58% | 15% | 2.79 |

^a 1 = Very Dissatisfied, 2 = Dissatisfied, 3 = Satisfied, 4 = Very Satisfied

- Overall, respondents are satisfied with the co-curricular experience at IUPUI.
- School of Science alumni report that they would like to have more opportunities for career development with 40% being dissatisfied, but this is not significantly different compared to alumni from other programs.

Figure 4
If You Could Start Over Again, Would You Go
To IUPUI?



• The majority of Science alumni (86%) would either probably or definitely attend IUPUI if they had an opportunity to start over again.

Table 3
Satisfaction with Assistantships & Internships/Externships ^a

| Percentage who are very satisfied/ satisfied with | Teaching Assistantship | Research Assistantship | Internship/ Externship |
|--|---------------------------|---------------------------|---------------------------|
| The extent to which it complemented your coursework | 84% | 92% | 95% |
| The extent to which it corresponded to your career goals | 81% | 82% | 90% |
| The extent to which it prepared you for the job market | 77% | 73% | 90% |
| The extent to which you were mentored/ supervised | 83% | 86% | 100% |
| N | 26 | 22 | 19 |

^a 1 = Very Dissatisfied, 2 = Dissatisfied, 3 = Satisfied, 4 = Very Satisfied

- Respondents were asked if they completed an assistantship or internship/externship while at IUPUI. Nearly half (44%) of all Science respondents had an assistantship while in school while just over a quarter (26%) of graduate student alumni completed an internship/externship while in school.
- Compared to other units on campus the School of Science has significantly more graduate alumni who had an assistantship and significantly less alumni who report completing an internship/externship.
- Among students who did not have an assistantship, most did not desire one (69%), but there
 were a noticeable amount that wanted an assistantship but did not receive one from their
 department (21%).
- The large majority of respondents are satisfied with how assistantships (90%) and internships/externships (94%) are assigned.
- Overall School of Science alumni are satisfied with their assistantships and
 internships/externships. A larger percentage of respondents who completed an
 internship/externship report being satisfied with how it prepared them for the job market and
 the extent to which they were mentored/supervised compared to alumni who completed an
 assistantship.

Section 4: Impact of IUPUI on Learning.

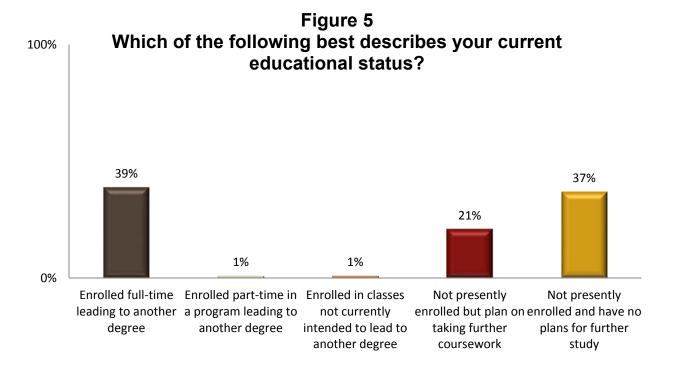
Table 4 Knowledge and Skills ^a

| Please indicate your level of effectiveness in each of the following skills/abilities. | Not at all Effective | Somewhat Effective | Effective | Very Effective | Mean |
|---|-------------------------|-----------------------|-----------|-------------------|------|
| in each of the following skills/abilities. | Percentages | | | | |
| Acquiring in-depth knowledge in your discipline | 1% | 11% | 48% | 39% | 3.25 |
| Conducting original research and scholarship | 7% | 24% | 36% | 33% | 2.94 |
| Understanding research/scholarship in your discipline | 4% | 10% | 47% | 39% | 3.20 |
| Communicating effectively with others in your discipline | 1% | 9% | 56% | 34% | 3.23 |
| Communicating effectively with the general public | 1% | 14% | 57% | 27% | 3.10 |
| Thinking critically | 0% | 7% | 39% | 54% | 3.46 |
| Thinking creatively | 3% | 20% | 42% | 35% | 3.10 |
| Applying good judgement in both professional and personal situations | 0% | 11% | 49% | 39% | 3.28 |
| Solving problems in your discipline | 1% | 4% | 55% | 39% | 3.32 |
| Conducting research in an ethical manner | 0% | 10% | 43% | 47% | 3.37 |
| Behaving in an ethical way | 0% | 4% | 45% | 51% | 3.46 |
| Using the knowledge gained in college to address social issues or problems | 6% | 9% | 57% | 29% | 3.09 |
| Understanding contemporary social issues | 4% | 21% | 51% | 23% | 2.93 |
| Exercising your responsibilities as a citizen (e.g. voting, actively participating in community and political issues) | 11% | 20% | 39% | 30% | 2.87 |
| Marketing yourself effectively | 4% | 31% | 46% | 19% | 2.79 |

^a 1 = Not at all Effective, 2 = Somewhat Effective, 3 = Effective, 4 = Very Effective

- Alumni respondents rate themselves as mostly effective on skills and abilities that are related to the principles of graduate and professional student learning (PGPLs).
- Respondents rate themselves highest on the skills/abilities of behaving in an ethical way (96%)
 and thinking critically (93%) where the vast majority believe they are either effective or very
 effective.
- School of Science graduate student alumni rate themselves lowest regarding marketing themselves effectively and conducting original research. But even the large majority (96%) rate themselves as at least somewhat effective on these two skills/abilities.
- School of Science alumni rate themselves significantly lower than other units on the items of
 exercising your responsibilities as a citizen and understanding contemporary social issues.
 Effectiveness ratings do rise when removing international students, but School of Science alumni
 rankings are still significantly lower than the rest of campus.

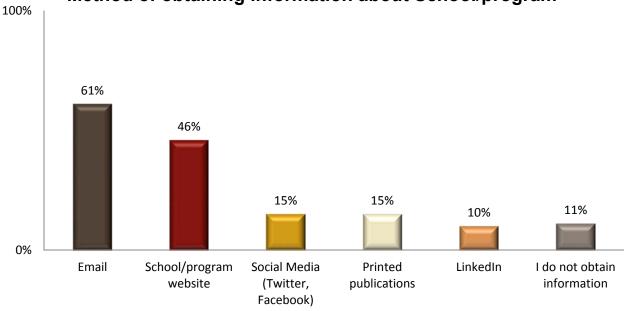
Section 5: Further Education



- Alumni from the School of Science have almost equal numbers of those who are enrolled fulltime leading to another degree (39%) and those who are not enrolled and have no plans for further study (37%).
- The School of Science has significantly more alumni currently enrolled full-time in another program (39%) than other units on campus (7%).
- Of those that are currently enrolled, a majority (61%) are enrolled at IUPUI.
- Three quarters (75%) believe their IUPUI education prepared them very well to pursue their new degree while nearly all (96%) report that it prepared them at least somewhat.
- Of those alumni who are enrolled in an institution leading to another degree, more than four out of five (82%) were accepted to their 1st choice school and 93% were admitted to at least their 2nd choice.

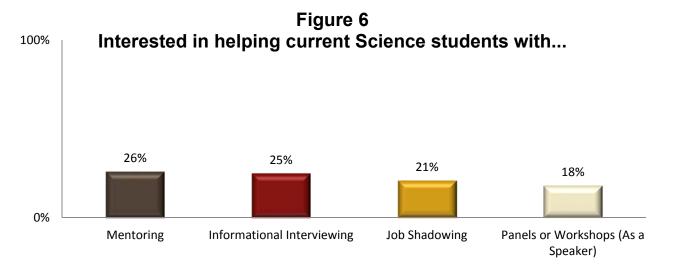
Section 6: Connection with School

Figure 6
Method of obtaining information about School/program



- The large majority (89%) of graduate alumni respondents obtain information regarding the School of Science.
- The two most common methods of obtaining information about the School of Science include email (61%) and the School's website (46%). It's important to note this information was obtained from a survey sent to e-mail addresses.
- Less than one out of five respondents (15%) report feeling a very strong connection toward the School of Science.
- The majority of alumni report feeling either some (49%) or very little (28%) of a connection to the School.

Section 7: School of Science Supplemental Questions



- The most common activities alumni from the School of Science would be interested in helping current students with include mentoring (26%) and informational interviewing (25%).
- The two most common events that interest respondents are career advancement (60%) and networking (38%). The other options of new student recruitment and class reunions both had less than 15% of alumni replying that they would be interested.
- Alumni are somewhat split between saying they attended college at IUPUI (39%) and Purdue University (29%), but the majority tell others they received their degree from Purdue University (60%).

