Ph.D. Student Success

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Graduate Student Success

- Graduate students form one-third of WSU’s student body

- We know their progress from admission through graduation (http://oira.wayne.edu/dashboard/graduate-school)

- We train our students for careers in academia

But how are students actually using their doctoral training i.e., what careers are they pursuing?
Doctoral Alumni Career Outcomes

Nationally, data are sporadic

But at WSU we have good data!
(Almost 90% of 3,000 Ph.D. Alumni over a 15-year period)
So what do our alumni do?

- Our alumni are pursuing careers in academia, but also in other employment sectors.

- Our alumni are employed in Michigan, in the U.S outside Michigan, as well as in countries across the world, thus serving WSU’s mission of making an impact locally, nationally and globally.
Broad Disciplines of Doctoral Training at WSU

Biomedical Sciences, including Social and Behavioral Sciences

Arts and Humanities

STEM
Biomedical Sciences PhD Career Outcomes Data Analysis

15-year Alumni Data*
(N=1027)

*Funded by a BEST grant from the National Institutes of Health (NIH)
Coming Soon!

STEM and Humanities

Supported by a grant from
Council of Graduate Schools

National Science Foundation
Andrew Mellon Foundation
Biomedical science PhD careers 0-15 years following graduation
(Career Type)
Biomedical Science PhD Career outcomes 0-15 years following graduation (Employment Sector)

0-15 Years

- Academia: 532 (44.00%)
- For-Profit: 322 (26.00%)
- Government: 52 (4.20%)
- Nonprofit: 37 (3.00%)
- Other: 6 (0.49%)

*Unknown (N=78) 7.59%
Biomedical Science PhD Career outcomes 2000-2014 (Academia and For-Profit)

**Academia**
- 0-5 years: 62.60%
- 6-10 years: 54.35%
- 11-15 years: 42.72%

**For Profit**
- 0-5 years: 25.59%
- 6-10 years: 29.35%
- 11-15 years: 36.79%
Over time, alumni are changing careers from Academia to For-profit and Other sectors
We are finding differences in career paths by Gender and Race/Ethnicity

- Women are more likely to pursue careers in health care sectors
- Black students are more likely to pursue careers in government and non-profit sectors
- The gap between men and women in tenure-track/tenure faculty positions widens over time

Interestingly, there is no correlation of GRE with career outcomes among the career sectors and types!
Biomedical Science PhD Alumni 15-Year Career outcomes (N=1027)

What They Do

Where They Work

Academia
For-Profit
Government
Nonprofit
Our alumni are pursuing careers in

- Academic Research-1 institutions
- Academic Primarily Teaching institutions
- For Profit (industry, Biotech, Big Pharma)
- Government/Regulatory Affairs

And they are changing career trajectories and sectors that require “transferrable skills” and competencies
So, how should we prepare our students for careers that are not just in academia?

*We must provide our students with the opportunity to explore careers in these sectors*

BEST Career Exploration Program
WSU BEST Program – Training Model
Structured Approach to Career Exploration

Phase I
For-Profit; Government; Regulatory; Teaching

Phase II
Interactive Workshops
(didactic training)
7 hours

Phase III
Career Explorations
(experiential learning)
6-12 weeks

Exploratory Seminars
(panel discussions)
1-2 hours
Our students are changing career trajectories and sectors

Therefore, they require competency-based training in “transferrable skills” that transcend career sectors

Graduate and Postdoctoral Professional Development Series
Competencies that align with the WSU mission and meet national needs

- Discipline-specific Research and Career Development
- Communication (Written, Verbal, Visual)
- Ethics (Responsible Conduct of Research)
- Teamwork and Collaboration
- Leadership and Professionalism

*How do students demonstrate mastery of these skills to potential employers?*
A micro-credential, also called a digital badge, is a tool for showcasing the skills and experience that may not be readily apparent by reading an academic transcript, resume or CV.

These badges are shareable via social media or professional websites to demonstrate skills and experience to prospective employers.
Building an Online Network

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Description:
As recruiters use social media more and more in the talent acquisition process, it is crucial for job seekers to have not only an active profile on LinkedIn, but one that stands out from the millions of users seeking the same jobs. An exceptional LinkedIn profile and online networking skills allow a job seeker to leverage the power of LinkedIn to identify, apply, and land the desired job. Advanced methods of...
How are we collecting and using these data?

Analytics
Recruitment
Assessment
Academic Program Review
Professional Development
New Programs
Advancement
Summary of WSU alumni data analytics

- Almost half our doctoral alumni work in Michigan, contributing to the economic and intellectual capital of the state.
- They are also making an impact nationally and globally, per our mission.
- Biomedical doctoral alumni are staying within careers in science.
- They change career sectors and career types over time, requiring us to provide them with tools for career exploration in the various sectors.
- They require credentialed professional development in transferrable skills that transcend the diverse career and sector types.
- There is no correlation between GRE scores and career outcomes (Academia vs. For-Profit).
- Women and Black alumni pursue careers outside of tenure/tenure-track faculty in higher percentages than do males and majority students.
We need your input!

- How can we disseminate this information on the impact of our doctoral alumni to stakeholders? *(Brag about our successful alum!)*

- How do we engage our alumni network?

- How do we further use these data for continuous improvement of our doctoral training programs?

- How do we use these data to recruit a diverse body of doctoral students who demonstrate grit, resilience and persistence regardless of performance in the GRE, who will become our successful alumni?
Thank you!

Graduate School team
Institutional Research
C&IT
Our awesome alumni