University of Michigan Medical School Department Websites:

Health and Information Technology Services

Survey Report

March 24th, 2018

Word count: 2999

https://docs.google.com/document/d/1MKBdLmzTz9kD0hGBtcD-V3gEtcGtHam_KA8X1aP8D-c/edit?usp=sharing

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0. Executive Summary

Our client is Health Information Technology & Services (HITS) under Michigan Medicine. Our project goal is to create website guidelines for them to distribute across departments at the University of Michigan Medical School (UMMS) so different programs have consistent and user friendly information structure.

In this survey study, there were 5 key findings:

1. **Some criteria remain important for PhD students**
2. **Some criteria change as students progress through their programs**
3. **Program Websites serve as a reflection of the program and the university, and influence applicant's perceptions on them**
4. **PhD program websites are the most used information channel to learn about programs**
5. **Most used resources aren't necessarily the most useful.**

As a result, we are recommending:

1. **Make information easy to find, updated, and evaluate competitive landscapes often**
2. **Adjust content based on current PhD student feedback**
3. **Provide contact information of faculty members and current students.**

1. Introduction

Our client is Health Information Technology & Services (HITS) under Michigan Medicine. Their objective is to provide support for public-facing web presences for various departments including clinical and basic science branches within the University of Michigan Medical School (UMMS). This web presence is primarily intended for prospective students, faculty, researchers, collaborators, and patients ("About HITS," n.d., para. 1).

Our client's problem is each department is responsible for their own webpages and have total freedom in information architecture and content. This resulted in structural inconsistencies across department websites. Thus, our project is to contribute towards creating a guideline for what content should be present on their web pages and how they should organize their webpages. For scoping, since program details and career outlooks for basic science and clinical fields are disparate, we could only focus on one for this project's scope, and we chose basic science departments after discussing with our client.

After learning about our target population from interviewing PhD students and competitors from comparative analyses; we used surveys to answer questions that could not be solved by previous investigations. Specifically, we want to answer questions that fall into the following categories:

1. **Criteria**: What criteria are important to prospective students.
2. **Information Channel**: What do prospective students use to get information.
3. **Perception**: Difficulty finding information,thoughts on outdated content, and how program websites influence perception of programs

These will help us devise a guideline that helps prospective students find information they seek efficiently on program websites.

We had to be selective about who we survey, as input from those outside our target population might skew the data. Thus, we decided to exclusively target current PhD students as our surveying population, since they experienced the application process and understand the needs and wants of prospective students.

2. Methods

2.1 Target Population

We exclusively surveyed current PhD medical students, which includes: 1) those currently enrolled in one of 14 medical science programs, and 2) those currently doing first year lab rotations (known as PIBS).

2.2 Recruiting Methods

Our client distributed our survey to those in the PIBS program at UM, and we sent surveys to PhD students already enrolled in a medical science programs through email. Our survey ran for 5 days.

2.3 Participant Demographics

We collected 34 responses. A demographics breakdown can be found in Appendix 7.3:

- Major: Figure 1
- Current year of program: Figure 2
- Age: Figure 3
- Geography: Figure 4
- Nationality: Figure 5

2.4 The Survey

We built our survey based on 4 overarching categories:.

1) **Criteria**: What criteria are most important to prospective students?
2) **Information Channel**: What do prospective students use to get information?
3) **Perception**: How did they feel about obtaining resources and encountering outdated information, and how PhD program websites influence program perception?
4) **Demographic**: General Information.

We first brainstormed questions relevant to each category, then trimmed and combined based on how much that question could answer. The survey underwent in-class peer review to ensure language used is understable by those unfamiliar with the project and leading questions are reworked.

We built our survey with Qualtrics (Qualtrics, Provo, UT) survey system and followed

Goodman's guideline (Goodman, Kuniavsky, & Moed, 2012) on survey workload. Before distributing our survey, we conducted three pilot tests using PhD students from other departments and other universities and revised based on feedback about the questions asked, their wording, and overall survey flow. Afterwards, we sent the survey out to our client for final approval; and began distribution.

The survey protocol can be found in Appendix 7.1

2.5 Data Analysis

We first took a qualitative approach while examining the data and noted patterns based on tables and graphics generated by Qualtrics' built-in tools, then made quantitative crosstab analysis with related questions to build the bigger picture. Finally, we organized these findings based on our overarching questions, and made recommendations accordingly.

3. Findings and Recommendations

3.1 Summary Results

Our survey results shed light on the change of students' program selection criteria and their information seeking behaviors. In summary, non-academic factors like funding availability and campus atmosphere are more important post-enrollment vs pre-enrollment. Additionally, we learned how program websites impact students perceptions and what aspects they value including, easy navigation, up-to-date information, and accessible faculty and research information. Lastly we learned applicants obtain information not only through websites but also from faculty and current students of programs they are interested in, which suggests websites should include robust faculty and student contact information.

3.2 Key Findings

1. Criteria: What criteria are most important to prospective students, survey Q3-Q5

Finding 1.1: Some criteria are important pre and post-enrollment
A majority of respondents ranked the following criteria as "moderately important" or higher for both pre and post-enrollment period (Table 1), which include:

- Campus Atmosphere

- Funding Availability
- Faculty Research Focus
- Program Ranking
- University Ranking
- Student Life
- Career Outlook
- Location

Recommendation 1.1: Ensure Information's ease of access
Display important information in simple, easy to understand ways so users can find what they need quickly.

Finding 1.2: Some criteria change as students progress through their programs
As students progress in their PhD programs, certain criteria become more important to them (Table 1), these include:

- Career Outlook
- Campus Atmosphere
- Funding Availability
- Program Ranking
- Location

Additionally, one criteria, *Course Requirements*, changed dramatically between pre and post-enrollment, with the latter finding it significantly more important than the former.

Recommendation 1.2: Adjust content based on current PhD student feedback
Because current PhD students have experienced the program, they can give feedback about what students need to know before applying; as such, department websites should adjust content based on current students' perspectives to best prepare prospective students for their programs. For example, program websites can include *Current Student Quotes* to illustrate the discrepancy between pre- and post-enrollment perceptions.

	When applying for PhD program	**Now**
Most people chose **Most Important**	Campus Atmosphere (38.24%) Funding Availability (55.88%) Faculty Research Focus (64.71%)	Campus Atmosphere (55.88%) ⬆ * Funding Availability (73.53%) ⬆ Faculty Research Focus (58.82%) Career Outlook (47.06%)*
Most people chose **Important**:	University Ranking (47.06%) Student Life (52.94%) Career Outlook (50.00%)	University Ranking (35.29%) Student Life (38.24%) Program Ranking (52.94%)

		Location (29.41%) Course Requirements (38.24%)
Most people chose **Moderately Important**	Admitted Student Statistics (41.18%) Program Ranking (44.12%) Location (26.47%) Course Requirements (41.18%) Admission Requirements (41.18%)	Admitted Student Statistics (32.35%)
Most people chose **Slightly Important**		Admission Requirements (44.12%)
More people feel **Important** or **Very Important**	Campus Atmosphere (70.59%) Funding Availability (88.23%) Faculty Research Focus (94.12%) Program Ranking (47.06%) University Ranking (64.71%) Student Life (67.65%) Career Outlook (76.47) Location (41.18%)	Campus Atmosphere (73.53%) Funding Availability (97.06%) Faculty Research Focus (91.17%) Program Ranking (64.7%) ⬆ University Ranking (50%) ⬇ * Student Life (70.59%) Career Outlook (91.18%) ⬆ Location (52.94%) Course Requirements (44.12%)
More people feel **Not Important** or **Slightly Important**	Course Requirements (41.17%) Admission Requirements (41.17%) Admitted Students Statistics (35.3%)	Admission Requirements (67.65%) ⬆ Admitted Students Statistics (41.18%)

*Colored Arrows indicates significant change 15% or more) between pre and post enrollment but within the same level of importance. Colored Text indicates criteria importance level change (Green for Higher, and Red for Lower).

Table 1: Criteria Change - Pre-enrollment vs Post-enrollment

2. Information Channels: What do prospective students use to get information, survey Q7,Q8,Q11

Finding 2.1: PhD program websites are the most used information channel through which student learn the information about programs

All respondents used PhD program websites to obtain information when applying. In addition, other information channels include:

- Research Lab Websites (88.24%)
- Faculty and professors from previous education (~53%)
- Faculty and students from candidates program of interest (50%)
- Non-school websites or online searches (50%)

We've learned prospective students acquire information through websites and personal contacts.(Table 2)

Information channel	**Use rate**	**Very useful or useful for obtaining effective information about the PhD program ***
PhD program websites	100% (34/34)	76.47% (26/34)
Research lab website	88.24% (30/34)	50% (15/30)
Faculty/professors from prospective students' previous education	52.94% (18/34)	50% (9/18)
Faculty/professors in the PhD program that candidates are interested in /applying for	50% (17/34)	82.35% (14/17)
Non-school websites or Google search	50% (17/34)	35.29% (6/17)
Current students in the program applicants that applicants are interested in/applying for	38.24% (13/34)	84.62% (11/13)
Classmates or alumni from prospective students' previous education	29.41% (10/34)	50% (5/10)
Physical materials (e.g. pamphlets, or brochures, books)	14.70% (5/34)	20% (1/5)
Others (PI and researchers from full time position, University Rankings)	5.89% (2/34)	Both were ranked 'Very Useful'

* Because we are focusing more on the 'useful' side, we left out the column for the response rate for 'not useful/slightly useful'. If interested, that data can be found in Appendix 7.2

Table 2: Information channels for obtaining information about the PhD program

Finding 2.2: The most used information resources aren't necessarily the most useful.

PhD program websites are the most used resource for students looking for information while applying for programs. However, respondents indicated other, less used resources were more useful than PhD program websites (highlighted in Table 2). These resources include:

- Faculty and current students in a program of interest
- Professors in a program of interest

Additionally, PhD program websites are also the most used resource for finding information regarding research labs. However, respondents indicated other, less used resources were more useful (Statistics highlighted in Table 3); these resources include:

- Professors in a program of interest
- Research lab websites

Information channel	Use rate	Very useful or useful for obtaining effective information about the Research lab information
PhD program websites	100% (34/34)	47.05% (16/34)
Research lab website	88.24% (30/34)	73.33% (22/30)
Faculty/professors from prospective students' previous education	52.94% (18/34)	22.22% (4/18)
Faculty/professors in the PhD program that candidates are interested in /applying for	50% (17/34)	82.35% (14/17)
Non-school websites or Google search	50% (17/34)	41.18% (7/17)

Current students in the program applicants that applicants are interested in/applying for	38.24% (13/34)	69.23% (9/13)
Classmates or alumni from prospective students' previous education	29.41% (10/34)	20% (2/10)
Physical materials (e.g. pamphlets, or brochures, books)	14.70% (5/34)	20% (1/5)
Others (PI and researchers from full time position, University Rankings)	5.89% (2/34)	'PI and researchers from full time position': Very Useful

Table 3: Information channels for obtaining information about research labs

Recommendation 2: Provide contact information of faculty members and current students

Our analysis shows faculty members and current students of PhD programs are underused but effective information for prospective students to learn about programs and research labs. We are unsure why these resources are underutilized, but providing contact information increases the likelihood of them being used.

3. Perception: Difficulty Finding Information; Thoughts on Outdated Information; Program Websites Influence, survey Q6, Q9, Q10, Q12

Finding 3.1: Program Websites serve as a reflection of the program and the university, and influence applicant's perceptions on them

We found PhD program websites have influence over student perceptions towards a school and program. Over 50% of respondents indicated a website was "Influential" or greater, with over 25% indicating it was "very influential." One respondent answered, "It was the first impression of the program. If it did not have all the information I wanted to know (i.e. class requirements, road map to degree, etc.) I was much less likely to apply."

Additionally, we asked students to elaborate on how websites influence their perception, and categorized the findings as follows:

Sub-Finding 3.1A: Ease to navigate and access correct information is desirable
4 of 20 respondents (20%) felt ease to locate information and information accessibility influenced their perception. One participant responded, “If the website was not easy to navigate, or did not contain the information I was seeking in an easily accessible place, I was more inclined to stop looking into/considering that university.”

Recommendation 3.1A: Make information easy to find
PhD program and research lab websites should be simple yet informative with their content. More insight will be gained during usability testing and heuristic evaluations.

Sub-Finding 3.1B: Outdated information leads to negative perception
3 of 20 respondents (15%) indicated outdated information affects their perception negatively. One respondent said, “If the website felt outdated, then I thought that was a reflection of the program and my potential experience there.” Our user interviews yielded a similar response, indicating this issue is prevalent.

Recommendation 3.1B: Keep important information up-to-date on websites
Content managers must ensure content is updated and accurate.

Sub-Finding 3.1C: Faculty, PI’s, and research members need descriptive information

3 out of 20 respondents (15%) indicated the importance of faculty and research information.One respondent replied, “Finding many research members and their interests was very important. Programs where it was difficult to learn about available mentors had less interest.” This finding will be evaluated during usability testing.

Recommendation 3.1C: Have faculty sections be a prominent feature
We recommend PhD program websites include a faculty section that includes information such as:

- Name
- Email,
- Phone Number
- Research Lab
- Research Focus

These criteria help ensure faculty sections of websites contain the types of information students want/need to know.

Sub-Finding 3.1D: UM has competition from other schools, with great websites
2 of 20 respondents (10%) indicated competitor schools had great websites which positively affected their perception of the school. One respondent replied, “Emory has a great website, which made me very interested in that school.” Currently, UM does a good job compared to their competitors based on our comparison analysis, but they must stay on top of their competition.

Recommendation 3.1D: Evaluate competitive landscape frequently
Due to growing competition, we urge UM to constantly evaluate their competitors and adapt to changing needs of their users.

Finding 3.2: Over 60% of participants indicated difficulty finding information on a PhD program website. This confirms websites could benefit from improvements. Heuristic reviews and usability tests will help extrapolate more details.

Finding 3.3: For PhD Websites, a high percentage of participants (82.35%) have come across outdated information; however, for those who have, the majority (53.6%) answered 'Sometimes' for the frequency of those occurrences, which implies efforts were made to keep those information updated. Surprisingly, while the majority of participants (64.3%) thought it is Important or Very Important to have up-to-date PhD program websites, a significant portion (35.7%) felt it was ‘Moderately Important’ or less.

Though research lab websites were beyond our scope, we included questions about them due to feedback gathered during interviews. We found 88.24% of respondents have come across outdated lab websites, and all responded at least 'Sometimes' or more to how often they come across outdated information. Interestingly, up to 46.7% of participants thought that having an updated research lab websites is 'moderately important' or less.

Recommendation 3.3: This recommendation matches recommendation 3.1B (Keep information updated)

4. Discussion

The main limitation of the survey format is we, as experimenters, have less freedom over the types of questions we could ask compared to an in-person interview. This means we could only observe the datas patterns without a precise assessment of respondents motivations and thoughts. However, with insights gained from previous studies, we can make more informed recommendations. Another limitation is we only opened our survey for 5 days (whereas other surveys could go active for a week or more), and collected fewer responses as a result. We believe this is not too big an issue,as we can see some interesting trends in the data with our 34 respondents. Lastly, after reviewing our data, we realize we should have been more specific in the wording of some questions. When creating the survey, we focused on making our questions shorter and less taxing to read, but this mentality may have decreased the specificity we had intended. Yet, this would not render our data useless, as we could still use cross question referencing to generate meaningful findings, and make appropriate recommendations.

5. Conclusion

In this survey study, there were 5 key findings: 1) Some criteria remain important for PhD students, 2) Some criteria change as students progress through their programs, 3) Program Websites serve as reflections of the program and the university, and influence applicant’s perceptions on them, 4) PhD program websites are the most used information channel to learn about programs, and 5) Most used information aren't necessarily the most useful. As a result, we are recommending: 1) Make information easy to find, updated, and evaluate competitive landscape often, 2) Adjust content based on current PhD student feedback, 3) Provide contact information of faculty members and current students. In future studies, we will conduct heuristic evaluation to see how current PhD program websites hold up.

6. References

About HITS. (n.d.). In *Health Information Technology & Services*' website. Retrieved March 11, 2018, from https://hits.medicine.umich.edu/about-hits

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Goodman, E., Kuniavsky, M., and Moed, A. (2012). Surveys, in *Observing the User Experience, Second Edition: A Practitioner's Guide to User Research* (pp. 327-383). San Francisco: Morgan Kaufmann.

7. Appendices

7.1 Survey Protocol

Introduction

Thank you for agreeing to take part in this survey to improve the current U-M Medical School department websites.
We will be collecting your thoughts and opinions on several themes including primary criteria for considering PhD programs and frustrations with the websites when you were applying.
This survey should take about 10-15 minutes to complete. All answers you provide will be kept confidential and only visible to the analysis team. If you would like, you may quit the survey at any time without any penalties or repercussions.

Please click 'Next' to get started!

Q1 What PhD program are you currently enrolled in?

- o First-Year Program in Biomedical Sciences (PIBS) at University of Michigan
- o Bioinformatics
- o Biological Chemistry
- o Biophysics
- o Cancer Biology
- o Cell & Developmental Biology
- o Cellular & Molecular Biology
- o Human Genetics
- o Immunology
- o Microbiology & Immunology
- o Molecular, Cellular & Developmental Biology
- o Molecular & Cellular Pathology
- o Molecular & Integrative Physiology
- o Neuroscience
- o Pharmacology
- o Other (Text Input)

Q2 How long have you been enrolled in your PhD program? (Number of years)
(Text Input, Validates with number >= 0 with 1 decimal)

Description: The following questions ask about **BEFORE/AFTER** your PhD enrollment.

Q3 Please rank the following criteria based on how important they were when you applied to your PhD program.

	Not Important	Slightly Important	Moderately Important	Important	Very Important
Program Ranking	O	O	O	O	O
University Ranking	O	O	O	O	O
Campus Atmosphere	O	O	O	O	O
Student Life	O	O	O	O	O
Admitted Student Statistics	O	O	O	O	O
Funding Availability	O	O	O	O	O
Faculty Members' Research Focus	O	O	O	O	O
Location	O	O	O	O	O
Career Outlook	O	O	O	O	O
Course Requirements	O	O	O	O	O
Admission Requirements	O	O	O	O	O

Q3.1 (Optional) Please Indicate any other criteria you had when you applied that is not included above.
(Text Input, No Validation)

Q4 How would you rank these criteria now that you have gone through parts of your PhD program?

	Not Important	Slightly Important	Moderately Important	Important	Very Important
Program Ranking	O	O	O	O	O
University Ranking	O	O	O	O	O
Campus Atmosphere	O	O	O	O	O
Student Life	O	O	O	O	O
Admitted Student Statistics	O	O	O	O	O
Funding Availability	O	O	O	O	O
Faculty Members' Research Focus	O	O	O	O	O
Location	O	O	O	O	O
Career Outlook	O	O	O	O	O
Course Requirements	O	O	O	O	O
Admission Requirements	O	O	O	O	O

Q4.1 (Optional) Please Indicate any other criteria you have now that is not included above.
(Text Input, No Validation)

Q5 (Optional) If anything regarding your criteria changed between **Pre-Enrollment** and **Post-Enrollment**, what are the reasons for the changes?
(Text Input, No Validation)

Q6 When you applied, how much did a PhD program website influence your perception of the program?

- o Not Influential
- o Slightly Influential
- o Moderately Influential
- o Influential
- o Very Influential

Q6.1 (Optional) Can you please elaborate on one of those influences?
(Text Input, No Validation)

Q7 What resources did you use when you were applying for PhD programs? (Select all that apply)

- ▫ PhD Program Websites
- ▫ Research Lab Websites
- ▫ Faculty/Professors in the program you were applying for
- ▫ Current Students in the program you were applying for
- ▫ Faculty/Professors from your previous education
- ▫ Classmates or Alumni from your previous education
- ▫ Non-School Websites or Google Searches
- ▫ Physical Materials (e.g. pamphlets, brochures, books)
- ▫ Other (Text Input)

Description: The following questions focus specifically on **PhD Program Websites**.

Q8 In retrospect, how useful were the following resources on obtaining effective information about the PhD program?

Display Logic: Only items participants chose in Q7 will show up in this table.

	Not Useful	Slightly Useful	Moderately Useful	Useful	Very Useful
PhD Program Websites	O	O	O	O	O
Research Lab Websites	O	O	O	O	O
Faculty/professors in the program you were interested in/applying for	O	O	O	O	O
Current students in the program you were interested in/applying for	O	O	O	O	O
Faculty/professors from your previous education	O	O	O	O	O
Classmates or alumni from your previous education	O	O	O	O	O
Non-School Websites or Google Searches	O	O	O	O	O
Physical materials (e.g. pamphlets, or brochures, books)	O	O	O	O	O
Other **(Pipe Text from Q7 if Other was selected)**	O	O	O	O	O

Q9 When you were applying for your PhD program, did you have difficulty finding any information from PhD program websites?

- o Yes
- o No

Q9.1 What information did you have trouble finding from PhD program websites? Select all that apply.

Display Logic: Show if Answered Yes to Q9

- ▫ Faculty Information
- ▫ Research Lab Information
- ▫ Admission Requirements
- ▫ Admitted Student Statistics
- ▫ Program Overview
- ▫ Course Requirements
- ▫ Funding Availability
- ▫ Campus Atmosphere
- ▫ Student Life
- ▫ Career Outlook
- ▫ Other (Text Input)

Q10 Have you ever come across outdated information on PhD program websites?

- o Yes
- o No

Q10.1 (Optional) How often do you come across outdated information on PhD program websites?

Display Logic: Show if Answered Yes to Q10

- o Never
- o Rarely
- o Sometimes
- o Often
- o Very Often

Q10.1.1 (Optional) When you applied for your PhD program, how important was it that PhD program websites were up-to-date?

Display Logic: Show if Answered Yes to Q10

- o Not Important
- o Slightly Important
- o Moderately Important
- o Important
- o Very Important

(Continued on Next Page)

Description: The following questions focus specifically on **Research Lab Websites**.

Q11 In retrospect, how useful were the following resources on obtaining effective information about the Research lab information?

Display Logic: Only items participants chose in Q7 will show up in this table.

	Not Useful	Slightly Useful	Moderately Useful	Useful	Very Useful
PhD Program Websites	O	O	O	O	O
Research Lab Websites	O	O	O	O	O
Faculty/professors in the program you were interested in/applying for	O	O	O	O	O
Current students in the program you were interested in/applying for	O	O	O	O	O
Faculty/professors from your previous education	O	O	O	O	O
Classmates or alumni from your previous education	O	O	O	O	O
Non-School Websites or Google Searches	O	O	O	O	O
Physical materials (e.g. pamphlets, or brochures, books)	O	O	O	O	O
Other **(Pipe Text from Q7 if Other was selected)**	O	O	O	O	O

Q12 Have you ever come across outdated faculty information on research lab websites?

- o Yes
- o No

Q12.1 (Optional) How often do you come across outdated information on research lab websites?

Display Logic: Show if Answered Yes to Q12

- o Never
- o Rarely
- o Sometimes
- o Often
- o Very Often

Q12.1.1 (Optional) When you applied for your PhD program, how important was it that research lab websites were up to date?

Display Logic: Show if Answered Yes to Q12

- o Not Important
- o Slightly Important
- o Moderately Important
- o Important
- o Very Important

(Continued on Next Page)

Q13 What is your age?
(Text Input, Validates with integer between 0 and 200)

Q14 Are you from the state of Michigan?

- Yes (1)
- No (2)

Q15 Are you an International Student?

- Yes
- No

Outro

Thank you very much for taking the time to complete this survey! Your responses have been recorded successfully.

Again, all answers you provided will be kept confidential. Feel free to exit the survey now.

(End of Survey)

7.2 Survey Results (Table Format)

How long have you been enrolled in your PhD program? (Number of years)

Text Entry
1
0
4
1
6
1
1
3
5
4
This table has more than 10 rows. Click here to view all responses.

The following questions ask about BEFORE/AFTER your PhD enrollment.

Please rank the following criteria based on how important they were when you applied to your PhD program.

#	Question	Not Important	Slightly Important	Moderately Importan	Important	Very Important	Response	Average Value
1	Program Ranking	1	2	15	11	5	34	7.38
2	University Ranking	1	4	7	16	6	34	7.53
3	Campus Atmosphere	1	-	9	11	13	34	7.91
4	Student Life	3	2	6	18	5	34	7.24
5	Admitted Student Statistics	6	6	14	6	2	34	6.06
6	Funding Availability	1	-	3	11	19	34	8.26
7	Faculty Members' Research Focus	-	-	2	10	22	34	8.59
8	Location	4	7	9	6	8	34	6.74
9	Career Outlook	-	1	7	17	9	34	8.00
10	Course Requirements	3	11	14	5	1	34	6.35
11	Admission Requirements	4	10	14	2	4	34	6.29

How would you rank these criteria now that you have gone through parts of your PhD program?

#	Question	Not Important	Slightly Important	Moderately Important	Important	Very Important	Response	Average Value
1	Program Ranking	-	4	8	18	4	34	8.65
2	University Ranking	1	8	8	12	5	34	8.21
3	Campus Atmosphere	-	6	3	6	19	34	9.12
4	Student Life	2	4	4	13	11	34	8.50
5	Admitted Student Statistics	6	8	11	6	3	34	6.88
6	Funding Availability	-	-	1	8	25	34	9.71
7	Faculty Members' Research Focus	-	-	3	11	20	34	9.50
8	Location	5	4	7	10	8	34	7.62
9	Career Outlook	-	1	2	15	16	34	9.35
10	Course Requirements	6	4	9	13	2	34	7.15
11	Admission Requirements	8	15	7	4	-	34	6.03

(Optional) Please Indicate any other criteria you have now that is not included above.

Text Entry
Program structure. ie. rotation time, first year class, opportunities to meet other first years.
Department culture
Number of faculty in the program; Average time to graduation; Program Leadership

(Optional) If anything regarding your criteria changed between Pre-Enrollment and Post-Enrollment, what are the reasons for the changes?

Text Entry
Emphasis on career resources is now important, but I wasn't thinking about it before I applied. Also student stats, where students go and how well they succeed.
Realized that the focus is on research, not classes
I appreciate what the University of Michigan has to offer more than before
It is important to make sure you fit in with the department.
Over the course of the last two years, the department has overhauled the curriculum and how the preliminaries are given and judged. Because of the changes in those, it's shifted the importance from just outlook of future opportunities to actually being aware of what is expected of you as a student.
I think when you struggle during your PhD, you truly find out whether the support systems, resources, and opportunities necessary for success are really available through your graduate program and your PI. I have become wise to this unfortunately the hard way, but they will certainly be lessons I will not forget.
Not as large an impact on my life
Location- it has been a bit hard getting used to the move I made.
Having been at Michigan for ~1 year, and having talked with friends in other similar phD programs at other big schools, I think the PIBS structure could be improved to help create a stronger community. For instance, we could benefit from smaller first year groups, or smaller groups within the larger first year class such as an IMSD type program. I also don't think we get enough opportunities to present our research during our first year to each other... such as poster presentations/oral presentations.

When you applied, how much did a PhD program website influence your perception of the program?

#	Answer	Bar	Response	%
1	Not Influential		1	2.94%
2	Slightly Influential		8	23.53%
3	Moderately Influential		8	23.53%
4	Influential		8	23.53%
5	Very Influential		9	26.47%
	Total		34	100.00%

(Optional) Can you please elaborate on one of those influences?

Text Entry
Largely helpful when deciding where to apply to; also out-of-date websites don't look great
I liked how accessible and easy it was to obtain information, specifically on admissions and the goals of the program
Emory has a great website, which made me very interested in that school.
Finding many research members and their interests was very important. Programs where it was difficult to learn about available mentors had less interest.
I was looking for potential PIs whose areas of research I was interested in through the website. This also influenced who I asked to interview with, as I was potentially interested in rotating in those labs. An up-to-date and thorough online profile for a faculty member with research rotation availability and a project description was hugely helpful in many cases.
The UM website was very informative and highly interactive, I learned a lot wandering around the various parts of the website I visited
The faculty active research must be up to date. This is one of the most important resources for prospective students.
PhD websites were where I got a lot of information on the program before applying. Some schools had old and hard to navigate websites, which was a turnoff.
The website was my primary source for gaining information about the program and the research focus of the department labs because of being an international student who couldn't personally come to see the university/department.
If the website was not easy to navigate, or did not contain the information I was seeking in an easily accessible place, I was more inclined to stop looking into/considering that university.
This table has more than 10 rows. Click here to view all responses.

What resources did you use when you were applying for PhD programs? (Select all that apply)

#	Answer	Bar	Response	%
1	PhD Program Websites		34	100.00%
2	Research Lab Websites		30	88.24%
3	Faculty/Professors in the program you were applying for		17	50.00%
4	Current Students in the program you were applying for		13	38.24%
5	Faculty/Professors from your previous education		18	52.94%
6	Classmates or Alumni from your previous education		10	29.41%
7	Non-School Websites or Google Searches		17	50.00%
8	Physical Materials (e.g. pamphlets, brochures, books)		5	14.71%
9	Other		2	5.88%
	Total		146	100.00%

Other
PI and researchers from full time position
University Rankings

In retrospect, how useful were the following resources on obtaining effective information about the PhD program?

#	Question	Not Useful	Slightly Useful	Moderately Useful	Useful	Very Useful	Response	Average Value
1	PhD Program Websites	1	1	6	16	10	34	3.97
3	${q://QID69/ChoiceTextEntryValue/9}	-	-	-	-	2	2	5.00
4	Research Lab Websites	1	5	9	7	8	30	3.53
5	Faculty/professors in the program you were interested in/applying for	-	-	3	7	7	17	4.24
6	Current students in the program you were interested in/applying for	-	-	2	4	7	13	4.38
7	Faculty/professors from your previous education	-	3	6	3	6	18	3.67
8	Classmates or alumni from your previous education	-	1	4	5	-	10	3.40
10	Non-School Websites or Google Searches	-	6	5	3	3	17	3.18
11	Physical materials (e.g. pamphlets, or brochures, books)	-	1	3	1	-	5	3.00

When you were applying for your PhD program, did you have difficulty finding any information from PhD program websites?

#	Answer	Bar	Response	%
1	Yes		21	61.76%
2	No		13	38.24%
	Total		34	100.00%

What information did you have trouble finding from PhD program websites? Select all that apply.

#	Answer	Bar	Response	%
1	Faculty Information		7	33.33%
4	Research Lab Information		6	28.57%
5	Admission Requirements		3	14.29%
6	Admitted Student Statistics		11	52.38%
7	Program Overview		5	23.81%
8	Course Requirements		12	57.14%
9	Funding Availability		12	57.14%
	Other:			
Attrition rates				
12	Career Outlook		14	66.67%
13	Other:		1	4.76%
	Total		85	100.00%

Have you ever come across outdated information on PhD program websites?

#	Answer	Bar	Response	%
1	Yes		28	82.35%
2	No		6	17.65%
	Total		34	100.00%

(Optional) How often do you come across outdated information on PhD program websites?

#	Answer	Bar	Response	%
1	Never		0	0.00%
2	Rarely		6	21.43%
3	Sometimes		15	53.57%
4	Often		6	21.43%
5	Very Often		1	3.57%
	Total		28	100.00%

(Optional) When you applied for your PhD program, how important was it that PhD program websites were up-to-date?

#	Answer	Bar	Response	%
1	Not Important		0	0.00%
2	Slightly Important		2	7.14%
3	Moderately Important		8	28.57%
4	Important		6	21.43%
5	Very Important		12	42.86%
	Total		28	100.00%

In retrospect, how useful were the following resources on obtaining effective information about the Research lab information?

#	Question	Not Useful	Slightly Useful	Moderately Useful	Useful	Very Useful	Response	Average Value
1	Faculty/professors in the program you were interested in/applying for	-	1	2	5	9	17	4.29
2	Research Lab Websites	-	3	5	9	13	30	4.07
3	PhD Program Websites	1	6	11	11	5	34	3.38
4	Current students in the program you were interested in/applying for	1	-	3	4	5	13	3.92
5	Faculty/professors from your previous education	5	4	5	2	2	18	2.56
6	Classmates or alumni from your previous education	3	4	1	2	-	10	2.20
8	Non-School Websites or Google Searches	5	4	1	4	3	17	2.76
9	Physical materials (e.g. pamphlets, or brochures, books)	1	2	1	1	-	5	2.40
12	${q://QID69/ChoiceTextEntryValue/9}	1	-	-	-	1	2	3.00

Have you ever come across outdated faculty information on research lab websites?

#	Answer	Bar	Response	%
1	Yes		30	88.24%
2	No		4	11.76%
	Total		34	100.00%

(Optional) How often do you come across outdated information on research lab websites?

#	Answer	Bar	Response	%
1	Never		0	0.00%
2	Rarely		0	0.00%
3	Sometimes		14	46.67%
4	Often		8	26.67%
5	Very Often		8	26.67%
	Total		30	100.00%

(Optional) When you applied for your PhD program, how important was it that research lab websites were up to date?

#	Answer	Bar	Response	%
1	Not Important		0	0.00%
2	Slightly Important		5	16.67%
3	Moderately Important		9	30.00%
4	Important		6	20.00%
5	Very Important		10	33.33%
	Total		30	100.00%

What is your age?

Text Entry
23
24
27
22
27
23
22
32
30
25
This table has more than 10 rows. Click here to view all responses.

Are you from the state of Michigan?

#	Answer	Bar	Response	%
1	Yes		13	38.24%
2	No		21	61.76%
	Total		34	100.00%

Are you an International Student?

#	Answer	Bar	Response	%
1	Yes		5	14.71%
2	No		29	85.29%
	Total		34	100.00%

(Optional) Please Indicate any other criteria you had when you applied that is not included above.

Text Entry
availability of labs I was interested in
Cost of living/housing availability
stipend amount, cost of living
High number of faculty with translational research interests that I also would potentially be interested in
Stipend
Program structure (PIBS umbrella program)
Financial aid/scholarship for international students

7.3 Participant Demographics

Major

#	Field	Percentage
1	First-Year Program in Biomedical Sciences (PIBS) at University of Michigan	26.47%
2	Bioinformatics	11.76%
3	Biological Chemistry	8.82%
4	Biophysics	0.00%
5	Cancer Biology	5.88%
6	Cell & Developmental Biology	0.00%
7	Cellular & Molecular Biology	5.88%
8	Human Genetics	5.88%
9	Immunology	2.94%
10	Microbiology & Immunology	2.94%
11	Molecular, Cellular & Developmental Biology	14.71%
12	Molecular & Cellular Pathology	5.88%
13	Molecular & Integrative Physiology	2.94%
14	Neuroscience	2.94%
15	Pharmacology	2.94%
16	Other	0.00%
		34

Showing Rows: 1 - 17 Of 17

Figure 1: Major Distribution

Current year of program

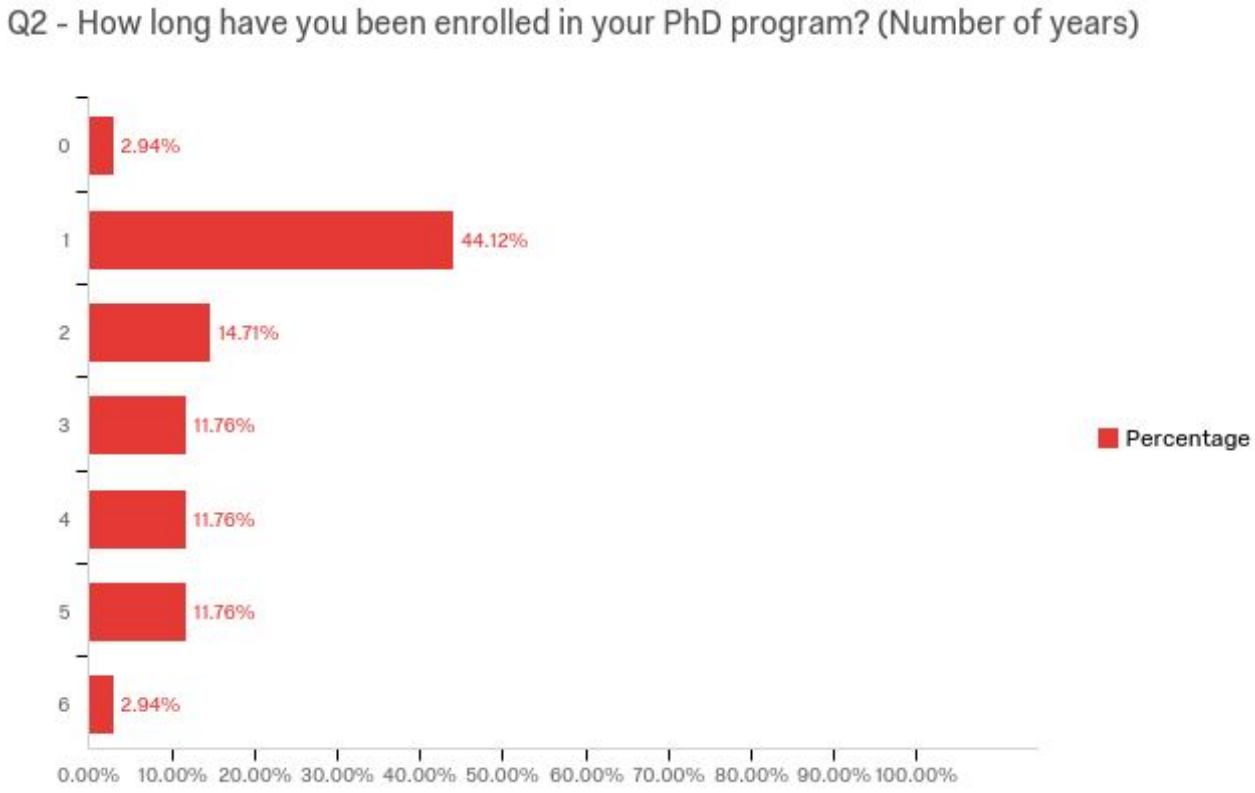

Figure 2: Current-Year-of-Program Distribution

Age

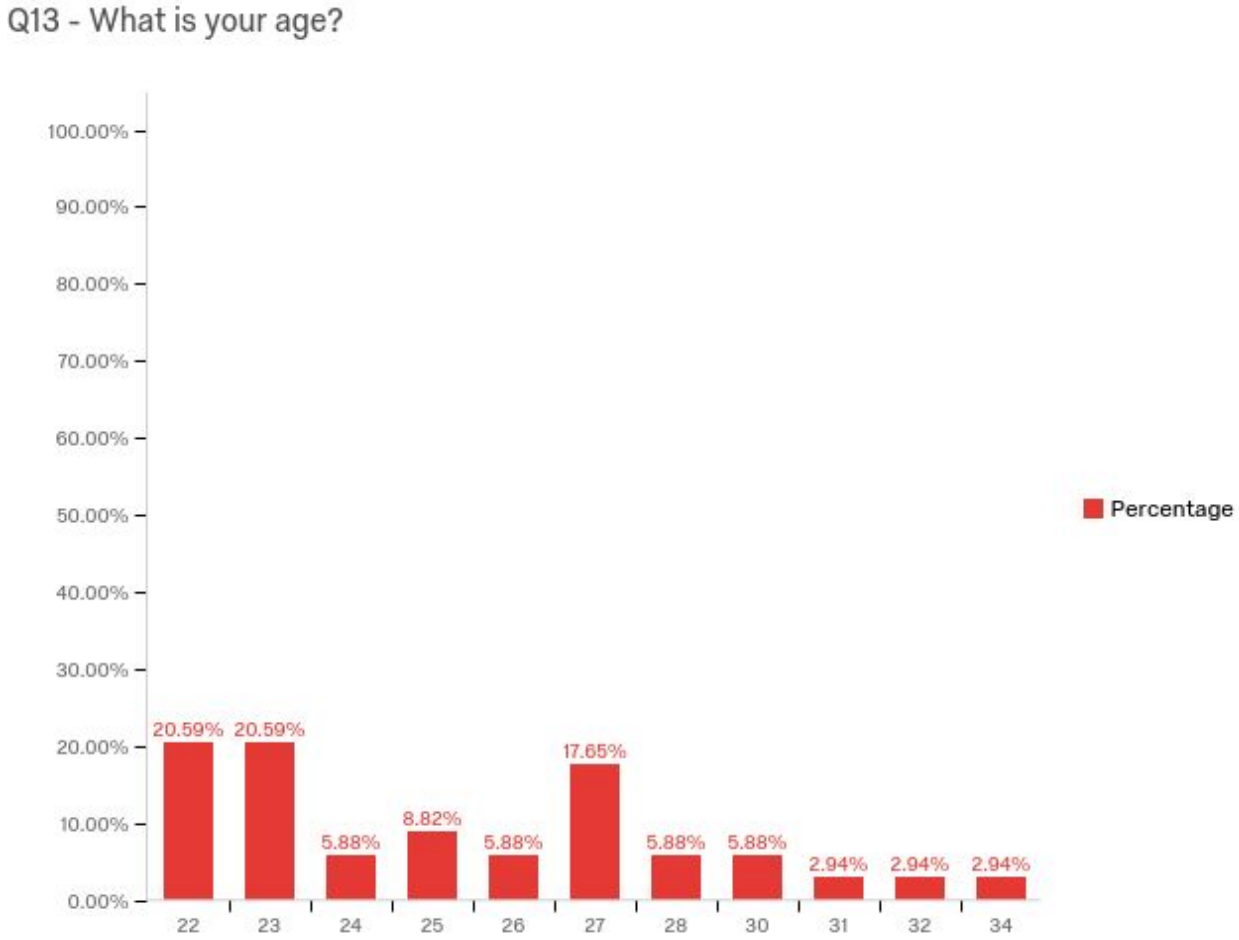

Figure 3: Age Distribution

Geography

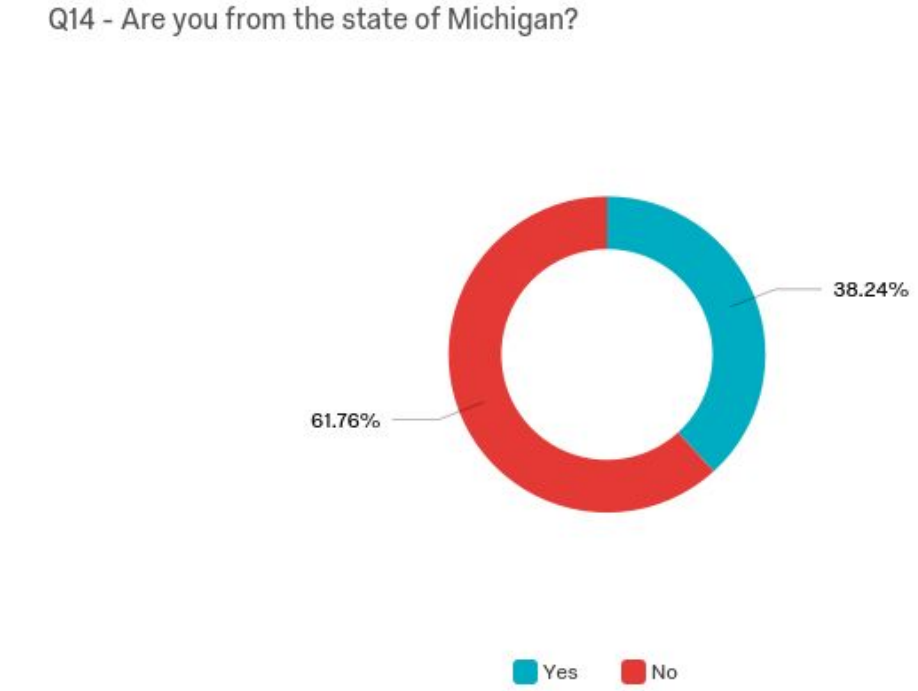

Figure 4: Geography Distribution

Nationality

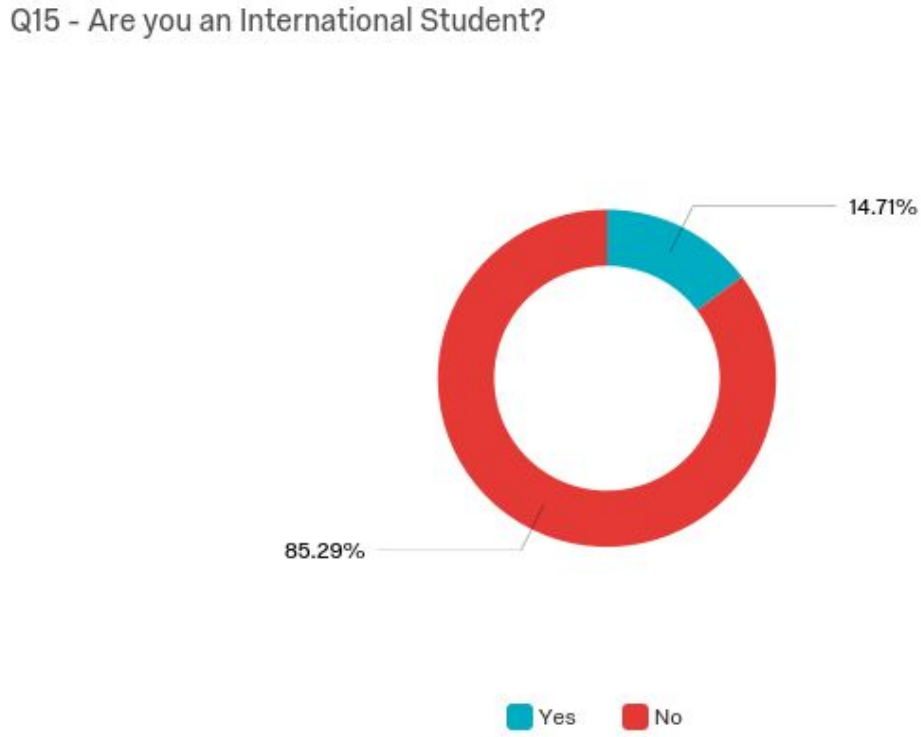

Figure 5: Nationality Distribution