

HOW DO MICHIGAN COLLEGE OF OPTOMETRY GRADUATES PRACTICE?

by

Ellery Vassallo

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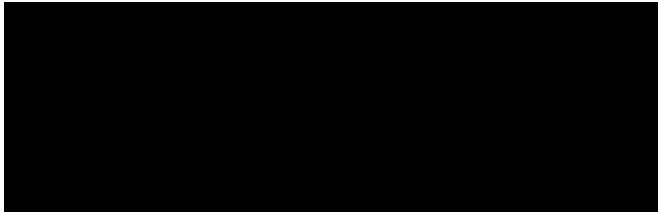
by

Ellery Vassallo

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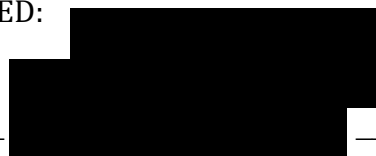
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ABSTRACT

Background: The Michigan College of Optometry has conducted alumni surveys in the past, however, this survey attempts to ascertain how recent graduates of the college are practicing, as well as additional information that may be useful to the college or current students. **Methods:** Respondents completed a survey sent out electronically through the alumni email database and the college's Facebook and Twitter accounts. Data was collected from practicing optometrist that graduated from the Michigan College of Optometry in the years 2008-2015. **Results:** Responses to 16 multiple-choice survey questions were significant in this study. **Discussion:** Graduating optometrist have certain perceptions, expectations and apprehensions of what to expect after graduation. Many of these expectations are real, others, personal views or assumptions. In this study many of these expectations were proven accurate and also many inaccurate.

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Introduction

Throughout optometry school, students are taught a wide array of subjects from ocular disease to pediatrics to practice management. Throughout the 4 years of lectures and clinic, students are told things to expect when they graduate. Among those things are many assumptions made by faculty, staff, company representatives, presenters, recent graduates, and current students about how optometrists practice outside of the university. Students are provided information about the realities of the practice world. A few examples are that private practice is not a declining practice setting, an achievable timeline to pay off student loans is 10 years and not all optometrists practice full scope optometry.

A study done in South Africa in 2006 titled Perceptions, expectations, apprehensions and realities of graduating South African optometry students or PEAR. In the PEAR study it was reported that optometry students thought opening their own practice was the most likely way of providing the greatest fulfillment for both personal and professional goals as well as providing the best long term security. Students based their thoughts on things that were told to them in by mentors, company representatives, and in classroom lectures.¹ According to NewgradOptometry.com paying a loan at the maximum allotted time at an average interest rate of 6.8% can mean you effectively pay your loan twice. New graduates should be prepared to pay off loans immediately and make a higher than minimum payment on their student loans each month.² This is a big factor for graduates when deciding on where to work because their salary needs to be high enough to pay large loan payment each month and still live comfortably. In the

PEAR study when students took their current financial situations into consideration, 44.1% of the respondents considered joining a corporate setting immediately after graduation to be a smarter financial decision compared to a private practice even though private practice was still their ultimate goal.¹ In a study done by the American Optometric Association in 2013 it is reported that 57% of optometrist see patients in a private practice setting and 24% are in a corporate setting.³ When starting this study it was predicted that a majority of Michigan College of Optometry graduates practice in a private practice setting.

In optometry schools around the country disease courses are being stressed because of the increase in age of the baby boomers generation. A study done by the American Optometric Association stated that in 2010 there were 36.89 million people in America that had cataracts, macular degeneration, diabetic retinopathy, or primary open angle glaucoma. By 2020 that number is expected to increase to 45.47 million Americans.³ Disease management and medical billing is stressed in optometry school to prepare students for the increase in ocular conditions in America. When starting this study it predicted that a large percentage of the examinations are billed medically.

The Michigan College of Optometry has conducted alumni surveys in the past, however, this survey attempts to ascertain how recent graduates of the college are practicing, as well as additional information that may be useful to the college or current students. Michigan College of Optometry graduates from the years 2008-2015 were surveyed. The questions asked in this survey were designed to help current students,

faculty and practicing optometrists understand how graduates of the Michigan College of Optometry practice.

Methods

Optometrists who graduated from the Michigan College of Optometry between the years 2008-2015 were selected to participate in this study. The study was initiated in April of 2016 and ceased in March 2017. A total of 86 participants chose to participate in the survey. The Ferris State University Institutional Research Board stated that the study was exempt from requiring approval.

The study consisted of a 16-question survey that was to be completed in a few minutes on the optometrist's own time. A sample of the survey is included in appendix A. The survey was created using QuestionPro and sent out electronically through the alumni email database and the college's Facebook and Twitter accounts. Completed surveys were submitted electronically via questionpro.com. All surveys were completed anonymously. Participating in the survey was stated in the introduction as providing consent.

The data was analyzed utilizing a multitude of statistical tests. The data was classified by graduation year, gender, fellowship status, and geographic location for analysis. Descriptive statistics were determined for each category.

Results

Graduates of the Michigan College of Optometry who graduated between the years of 2008 and 2015 were asked to complete the survey. A total of 86 surveys were completed over the course of the study and included in the analysis. Participants were

asked not to complete the survey more than one time. Graduates from 2014 had the most participation with 17.81% of the completed surveys. Of the participants, 15.07% graduated in 2015, 13.7% in 2013, 13.7% in 2012, 8.22% in 2011, 13.7% in 2010, 6.85% in 2009, and 10.96% in 2008. Two groups were created for further analysis. Group 1 consisted of graduates between the years of 2012 and 2015 and group 2 consisted of graduates between 2008 and 2011. Of the participants in this study, 37% were male and 63% were female. A majority, 74%, of the participants have practiced in Michigan in the past or practice in Michigan currently, 26% have never practiced in Michigan.

When asked what percentage of student loans the participants had left to pay off 3.41% said they have no student loans because they never took out loans for education and 26.14% reported they have already paid their loans off in full. Of the participants who have paid off their loans, 6.9% are from group 1 and 31.66% are from group 2. In group 1, 17.3% of the participants have more than 50% of their student loans remaining. In group 2, 7.7% have more than 50% of their remaining. Below is a chart representing each class and the percentage of loans they have left. (see Figure 1)

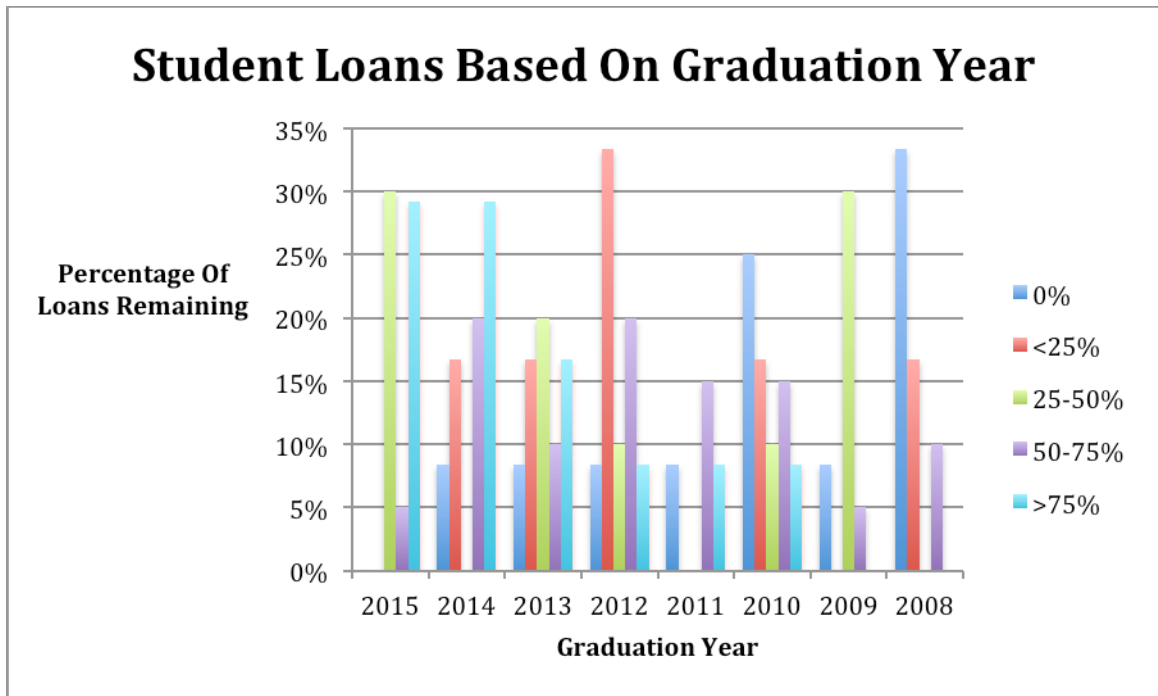


Figure 1: Percentage of loans remaining for each graduation year.

The survey also asked questions about their involvement in organized optometry. When asked about being a fellow in an optometric organization, 57.55% of participants reported not being a fellow of the American Academy of Optometry, the College of Optometrist in Vision Development, or National Academies of Practice. Comparing group 1 vs. group 2, there is a significant increase in fellows in Group 2. Only 18% of group 1 reported being fellows while 33% of group 2 reported being fellows. Of the 22.64% of participants who are fellows of one of the organizations, the American Academy for Optometry was the most common with the College of Optometrist in Vision Development being the next most common organization. Of the participants who reported their primary mode of practice being academia only 18.18% of them are a Fellow of one of the previously listed organizations. Of the participants who are employed by a

veteran’s administration, 12.12% are fellows. The highest percentage of fellows, 21.21%, practice at OD/MD practices.

Participants were asked about their involvement in their state association, 68.97% of the participants are a member of their state optometric association and the American Optometric Association. Of the participants who reported practicing in Michigan, 60.71% are members of the Michigan Optometric Association, slightly less than the average of 68.97%.

Questions regarding everyday practice included asking the mode of practice. In this study 43% of participants work at a private practice optometry office; 30.48% reported being in a multi-optometrist private practice, 13.3% are in a solo private practice. According to the American Optometric Association 57% of optometrist are in private practice settings. In this study 18.1% of participants reported working in a corporate office setting, which is lower, than the national average of 24%. Of the participants, 18.1% are in an office with both optometry and ophthalmology, 5.71% are in

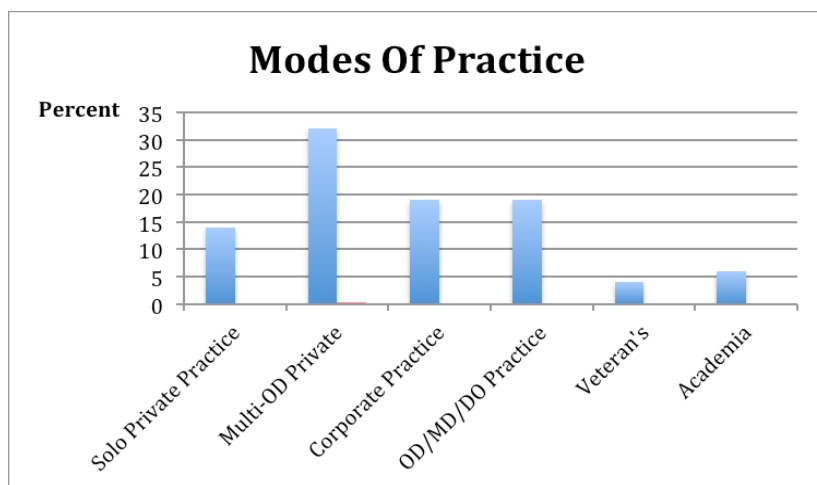
academia,

and

3.81% are at

a

veteran’s



administration. (See Figure 2)

Figure 2: Modes of Practice of participating Michigan College of Optometry Graduate

Of the participating optometrists, 10.48% report working at other locations including Indian Health Services, associated with hospitals, military bases and consulting. When comparing participations in group 1 vs. group 2, there was not a significant difference between the percentage of doctors practicing in a solo practice as group 1 had 10% and group 2 had 9.9%. When looking only at participants who practice in Michigan, the most common mode of practice was multi-OD private practice and OD/MD practices; 27.69% of participants are in multi-OD private practice and 21.54% reported OD/MD practice.

In this study, 57.95% of the participants only see patients at 1 location, 22.7% see patients at 2 locations, and 19.32% see patient at 3 or more locations. In group 1, 62.44% of participants examine patients at 1 location. In group 2, 75% of the participants only see patients at one location. For participants that practice in Michigan, 55.36% see patients at only 1 location. On a typical day, the majority of participants examine between 15 and 25 patients (45.45%). 39.7% of the participating doctors examine 9-15 patients, 9.09% examine 8 patients or less and 5.68% examine over 25 patients per day. Of the

participating optometrists, 54.55% of them dilate 75-100% of the patients presenting for complete examinations, 4.55% only dilate patients presenting with medical reasons. Many of the participants responded with a free response saying they use an Optos machine and only dilate if something is pathology in the photo. Along with seeing primary care examinations many of the participants also see specialty exams, 16.5% performing contact lenses examinations, 7.82% fitting specialty contact lenses such as ortho-K, and scleral lenses, and 16% performing ocular disease examinations.

In this study 29.59% of optometrist bill less than one-quarter of their exams medically 37.5% of the doctors bill one-quarter of their exams medically, 31.82% bill over half of their exams medically. Looking at participants who reported working in a corporate practice 70% do not bill any medical exams, participants who work in solo private practices 50% bill over 50% of their exams medically. Of the participants in OD/MD practices 56.26% of them report billing over 50% of their exams medically. Below is a chart showing the percentage of exams each mode of practice bills medically.

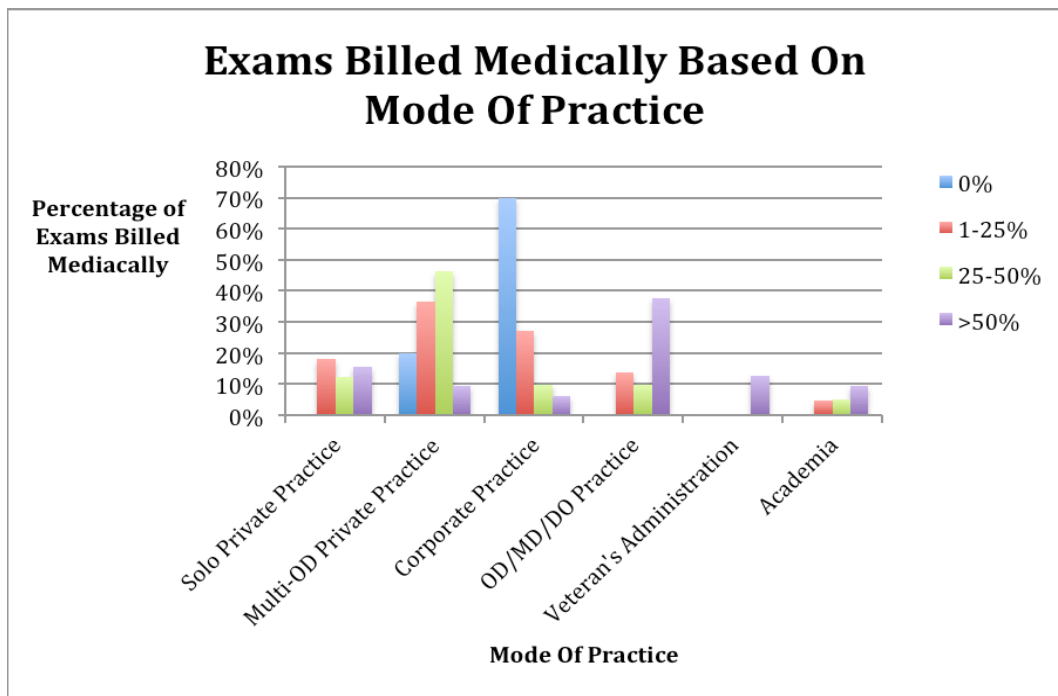


Figure 3: Percentage of examinations billed medically based on the mode of practice.

In this study 87% of the participating doctors consider themselves as practicing full-scope optometry, but only 75% feel confident in analyzing ocular coherence tomographies (OCTs). Of optometrists in group 1, 92.5% consider themselves as practicing full-scope, compared to 85% in group 2. 83.25% of group 1 feel confident analyzing OCTs compared to 75% of group 2.

The areas of optometric practice that the participants felt least prepared for varied widely and included contact lenses 4.69%, binocular vision 7.81, and low vision 2.6%; The top 2 subjects being ocular pathology 28.12% and practice management 17.19%.

Discussion

The percentage of student loan debt the participants in this study have left to pay corresponds to what was predicted at the start of this study. Graduates who graduated in group 2 have less debt remaining than graduates in group 1. In group 1, 17.3% of the participants have more than 50% of their student loans left to pay off. In group 2, only 7.7% have more than 50% of their loans left to pay off. This was expected when starting this study, the longer an optometrist has been working it is expected that they have made more payments towards their student loans. In group 1, 17.3% of the participants have more than 50% of their student loans left to pay off, this was a lower percentage than predicted when starting this study. According to the Review of Optometry a study done on NOVA Southeastern University College of Optometry students, many new graduates had to go to a 20 or 30 year student loan repayment plan in order to have a monthly loan

payment that was reasonable.⁴ This shows that Michigan College of Optometry graduates are able to pay off their student loans in a timely matter.

Comparing group 1 vs. group 2, there is a significant increase in participants who are a fellow of one of the organizations. In group 1, 18% of the participants reported being a fellow and 33% of group 2 reported being a fellow. This was expected when starting this study because to become a fellow of one of the organizations there are a series of tasks you must accomplish to earn points towards your fellowship status. The more years in practice, the easier it is to gain the points needed to go through the fellowship process. According to New Grad Optometry, it is highly recommended for optometrists planning a career in academia and veterans administration facilities to complete a residency before applying for the position.^{5,6} It is also reported that one of the benefits of doing a residency is that it gives you advantage when becoming a fellow.⁵ Of the participants in academia, only 18.18% of them are fellows in previously listed organizations and 12.12% of the participants that practice at a Veteran's Administration are fellows. This was not expected when starting this study; a much higher percentage of optometric fellows in academia and the veteran's administration was expected because one of the advantages of doing a residency is it earns the resident points towards gaining their fellowship status.

According to the American Optometric Association the number of participants in private practice was less than the national average, and the amount of participants in corporate settings was higher than the national average.³ When starting this study it was predicated that the results would be the opposite and that Michigan College of Optometry graduates would be at or above the average for private practice and below average for

corporate settings. Of the 40,000 optometrists in the United States 57% are in a private practice setting. Another 24% have a primary setting as an affiliate of a retail optical chain, either as a franchisee, independent contractor or employee. Further, 8% practice in ophthalmology offices. The remaining 11% of ODs practice in government and other institutional settings.³

There was no significant trend for type of practice between group 1 and group 2. When starting this study, the number of solo private practice doctors was predicted to be highest in group 2 but this was not the case based on the results. According to an American Optometric Student Survey in 2013, 81% of optometry students expected to be self employed 5 years after graduation.³ In the 2007 PEAR a study was done that showed 53.8% of graduates felt that the most likely mode of practice that will provide the greatest fulfillment for their professional goals within the next ten years is opening their own practice.¹ Corporate optometry representatives report that newly graduated optometrists will go to a corporate setting for a few years to gain experience and pay off student loans and then transition into a solo private practice. In an article put out by the American Optometric Association Joseph L. Shetler, O.D., an assistant professor at Northeastern State University's College of Optometry talks about how many of his students start in a corporate location, taking a higher salary position initially with no opportunity for ownership.⁴ According to new grad optometry it is difficult to find full time work at a private practice, jobs working in opticals and commercial settings are easier to acquire when newly graduated. When comparing graduates in solo private practices, group 1 had 10% and group 2 had 9.9%, which is not the significant differences expected when

starting this study. These results show that many optometrists initially plan on transiting from a corporate setting into an independent setting but, not many actually do.

Based on the 2007 PEAR study and the Michigan optometric association, It was predicted that the majority of Michigan College of Optometry alumni in the survey group would be part of a group practice and only see patients at one location. According to the results, the most common type of practice modality is multi-optometrist private practice. Over half of the participants in this study reported seeing patients at one location. It was also found that participants in group 2 had a higher percentage of only seeing patients at one location, showing that after a few years of practicing, alumni are more likely to be established and have less need to practice at multiple locations in order to obtain full-time work. In order to work five days a week, many newly graduated optometrists work at multiple locations.

Of the participants who reported practicing in Michigan, 60.71% are members of the Michigan Optometric Association (MOA). This was higher than what was anticipated when starting the study. According to the MOA only 50% of current optometrists practicing in Michigan are a member of the MOA. This shows that Michigan College of Optometry graduates who graduated after 2008 have a higher percentage of involvement in their state association than the rest of the state of Michigan.

It was expected when starting this study that medical eye exams would be a significant part of Michigan College of Optometry graduates exams. According to the American Optometric Association in the average private practice office, medical eye exams account for 17% of total patient visits.³ Optometrists in corporate settings provide less medical eye exams compared to optometrist in private practices. It's estimated that

80-85 percent of ODs have some level of involvement with medical eye care, but in less than 25 percent of practices this is major source of income.³ In this study Michigan College of Optometry graduates bill more examinations medically than the participants in the study done by the American Optometric Association.

Over the past 10 years, optometry has acquired a new range of diagnostic instruments, allowing them to more accurately and quickly diagnose and manage ocular disorders and to prescribe appropriate therapies. Optometrist in group 2 did not have as much of the technology out today when they were in optometry school. It was expected when starting this study that the participants in group 2 would not be as confident in analyzing OCTs as participants in group 1. A more recent graduate may say that practicing full scope optometry requires being confident in analyzing OCTs, this is not the case in this study. 85% of participants in group 2 consider themselves as practicing full scope optometry even though only 75% of them feel confident in analyzing OCTS.

This study had many limitations. The survey was sent out through email over a 2-week period to anyone who graduated in an eight-year time span. This limited the number of alumni able to participate in the survey but provided a clearer snapshot of recent graduates. This study population may not represent the input from alumni who do not regularly check their email, do not have access to emails from the Michigan College of Optometry Alumni Association or have not provided a current email address. In addition, the survey was advertised through social media outlets including Facebook and Twitter, however, not all alumni are members or actively participate in these outlets. The sample size in future studies could be greatly increased to obtain additional data, although it would encompass additional graduation years.

In retrospect, it may have been beneficial to administer the study with more yes or no questions, making it easier to analyze the data and make comparisons between questions. It would be beneficial to ask more questions about clinical confidence and how and when they refer patients to other providers.

APPENDIX A
SURVEY PRESENTED TO PATIENT

Trends of Michigan College Of Optometry Graduates

1. What year did you graduate from the Michigan College Of Optometry
 - a. 2015
 - b. 2014
 - c. 2013
 - d. 2012
 - e. 2010
 - f. 2009
 - g. 2008

2. Please select your gender
 - a. Male
 - b. Female

3. Are you a fell of the AAO, COVD, NAP or any other optometric-related organization?
 - a. Yes
 - b. No
 - c. I am in the process of becoming one
 - d. If yes please list which one: _____

4. Are you a member of your state optometric association/AOA?
 - a. Yes
 - b. No

5. What is your mode/s of practice? Check all that apply.

- a. Solo PP
- b. Multi-OD Private Practice
- c. Corporate
- d. OD/MD/DO Practice
- e. Veteran's Administration
- f. Academia
- g. Other: _____

6. How many locations do you examine patients

- a. 1
- b. 2
- c. 3
- d. 4 or more

7. How many hours do you work a week on average?

- a. 25 or less
- b. 25-30
- c. 30-35
- d. 40-45
- e. 45+

8. Do you currently practice in Michigan?

- a. Yes
- b. No

9. Have you ever practiced in Michigan?
- a. Yes
 - b. No
10. On a typical day how many patients do you examine?
- a. 0-4
 - b. 5-8
 - c. 9-15
 - d. 15-25
 - e. 25+
11. What percentage of your patients presenting for a complete exam do you Dilate?
- a. 0%
 - b. 0-25%
 - c. 25-50%
 - d. 50-75%
 - e. 75-100%
 - f. Only patients with a medical reason for the examination
 - g. Only first time patients
 - h. Other, please explain
12. Do you preform the following types of examinations? Check all that apply.
- a. Primary Care
 - b. Geriatrics
 - c. Contact lens fitting and evaluation (such as soft, rigid, multifocal and toric lenses)

- d. Specialty Contact Lenses (such as Ortho-K, Post-Surgical or Scleral Lenses)
- e. Pediatrics
- f. Ocular Disease
- g. Low Vision
- h. Neur-Optometric Rehabilitation
- i. Electrodiagnostics

13. Do you consider yourself as practicing full scope optometry?

- a. Yes
- b. No

14. Do you feel confident analyzing OCTs?

- a. Yes
- b. No
- c. Somewhat

15. What percentage of patients do you bill medically?

- a. 0%
- b. 1-25%
- c. 25-50%
- d. >50%

16. What percentage of student loans do you have left to pay?

- a. 0- I have already paid them off
- b. <25%
- c. 25-50%

- d. 50-75%
- e. >75%

17. What subject do you wish you learned more about in school?

- a. Pediatrics/Binocular Vision
- b. Posterior Segment Disease
- c. Anterior segment disease
- d. Low vision
- e. Neuro-Optometric Rehabilitation
- f. Contact Lenses
- g. Ethics
- h. Environmental Vision
- i. Other: _____

References

1. Oduntan, A. O., Louw, A., Moodley, V. R., Richter, M., & Poser, P. V. (2007). Perceptions, expectations, apprehensions and realities of graduating South African optometry students (PEAR study, 2006). *African Vision and Eye Health*, 66(3). doi:10.4102/aveh.v66i3.241
2. Chirumbolo, A. (2015, March 07). New Graduate Optometrist Guide to Job Searching. Retrieved February 11, 2017, from <http://www.newgradoptometry.com/new-graduate-optometrist-guide-job-searching/>
3. AOA Excel & Jobson Medical Information LLC (2013). The State of Optometric Profession 2013. Retrieved March 2017, from https://www.aoa.org/Documents/news/state_of_optometry.pdf
4. S. (2008, November 19). O.D. Students in Big Time Debt. Retrieved April 11, 2017, from <https://www.reviewofoptometry.com/article/od-students-in-big-time-debt>
5. "How to Become a Fellow | American Academy of Optometry." How to Become a Fellow | American Academy of Optometry. Accessed February 07, 2017. <http://www.aaopt.org/becoming/efellowship>
6. OD, Erik Mothersbaugh. "5 Steps to Getting a Clinical Faculty Position at an Optometry School." NewGradOptometry.com. January 23, 2016. Accessed March 09, 2017. <http://www.newgradoptometry.com/5-steps-getting-clinical-faculty-position-optometry-school/>.
7. Doctor debt. (2015, February). Retrieved February 11, 2017, from <http://www.aoa.org/news/aoa-focus/januaryfebruary-2015/doctor-debt?sso=y>