

MICHIGAN COLLEGE OF OPTOMETRY EXTERNSHIP HOUSING SURVEY

by

April A. Jones

and

Tyler B. Cook

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by

April A. Jones

and

Tyler B. Cook

Has been approved

May, 2011

APPROVED:

\_\_\_\_\_, Faculty Advisor  
Robert Buckingham, O.D., F.A.A.O.

ACCEPTED:

\_\_\_\_\_  
Faculty Course Supervisor

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Doctor of Optometry Senior Paper  
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MICHIGAN COLLEGE OF OPTOMETRY EXTERNSHIP HOUSING SURVEY

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## ABSTRACT

*Background:* Externship site selection is one of the most important decisions made during a student's optometric education. At Michigan College of Optometry, a website exists with a wealth of information to assist students through the selection process. This website, however, lacks detailed information about one of the most basic necessities: housing. Currently, no organized method of disseminating information about the previous interns' living arrangements exists. This research study investigated the rotation housing of the past three graduating classes of Michigan College of Optometry in order to organize the information and make it available to third year students during the externship site selection process. *Methods and Results:* A survey was generated to explore the type of housing, the location, the lease term, and the approximate rent and utility costs for each specific externship site. The results were compiled and the information was used to create a Facebook group to provide guidance to future optometry classes. *Conclusions:* The information gathered from this survey can be a valuable and easily accessible tool for third year Michigan College of Optometry students when selecting and moving to externship sites for fourth year rotations.



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## INTRODUCTION

Optometry is in a way as much of an art as it is a science. While it is imperative that the optometrist thoroughly understands ocular and systemic anatomy, physiology, pathology, and pharmacology, this knowledge must be applied judiciously to each patient that presents for examination in order to accurately diagnose and manage any existing ocular conditions. Being able to distinguish the various shades of normal from the various shades of pathology requires that the optometrist sees a vast number of eyes, both healthy and diseased. Learning how to efficiently apply the basic knowledge acquired during the academic courses into a real-life setting to appropriately manage patients is the primary focus of the fourth year clinic externships. The website for Michigan College of Optometry (MCO) offers the following description of the fourth year externships: “All didactic courses are offered within the first three years of the curriculum, freeing the entire fourth year for a concentrated clinical experience. Fourth year clinical externships serve to bridge the gap between student and professional life.”<sup>1</sup>

The clinical experiences acquired during the fourth year mold a clinician’s practice for the rest of his career. In 2002, a survey was conducted in order to determine what factors influence the successful practice of optometry. When asked where they acquired the skills critical to the daily practice of optometry, 66% of the survey respondents stated that it was from experience and 59% credited the optometric curriculum<sup>2</sup>. The fourth year serves to combine these arenas, providing the opportunity for intrinsically motivated learning with guidance readily available. In addition to honing clinical skills, the fourth year externships let students experience a wide range of patient populations, clinical settings, and practice models. Conversations with multiple

practicing optometrists have suggested that the fourth year rotations are invaluable because practicing in varied settings and being exposed to specialties that they may not have considered during the academic phase of the curriculum helped to delineate what their true clinic interests were and were not. If the fourth year clinical experiences are critical in defining each optometrist, it follows that the rotation selection process some of the most important decisions made in the clinician's professional life. When contemplating such crucial choices, it is imperative to have as much information as possible about each available opportunity.

The administration of Michigan College of Optometry has made a concerted effort to provide as much information to third year students as possible about each clinical externship site that is available for a particular academic year. An approximately eight hour lecture series is given to each class to delineate all the particulars of each site, including the practice's specialty strengths, the available equipment, the anticipated schedule, and a brief introduction to the clinical preceptors. Questions are encouraged during this lecture series so that all may benefit from the added information. Further, a website entitled "Fourth-Year Rotation Sites" is also provided to allow students to revisit the details at their convenience. At a glance, the future interns have access to the site address, the type of practice, the practice's mission, the number of MCO students per rotation, brief orientation instructions, a list of faculty with contact information, the anticipated schedule, the educational objectives, the scope of the externship, brief housing information, a community description, and miscellaneous information<sup>3</sup>.

It is clear from all of the effort on the part of the administration that the fourth year clinical experiences are to be deeply contemplated. Many factors must be taken into

consideration during the rotation site selection process. The primary considerations are the clinical experiences offered and geography. The selection process rules state that all students must be exposed to primary care, low vision, pediatrics, ocular disease, and contact lenses. It is also mandatory that students work in non-overlapping modes of practice<sup>3</sup> to ensure the most varied clinical experiences possible. These rules set up an environment hospitable for exploring the various aspects of this profession. Outside of complying with these guidelines, students are free to customize their experience and find their niche within optometry. What each site offers the intern and how that complements a student's overall professional goals must be considered above all else.

While it should be a secondary consideration, geography is a common concern while selecting rotations. Many students are strongly drawn towards sites that put them in close proximity to family and friends or to a location that they desire to practice in after graduation. Exploring these options renders social, economic, and professional benefits. Living close to friends and family can provide social opportunities or the possibility of free or reduced cost housing. Selecting a clinical experience for its location, provided it coincides with your professional goals, can offer valuable networking opportunities. Networking is a critical part of any healthcare profession<sup>4</sup>. Getting to know the optometric and health professional community in a given location allows the future optometrist to begin to understand the needs to the community and how to best meet them. It can provide mentors to influence professional development. The intern can also begin to build a necessary referral network in the local optometry, ophthalmology, and larger health care communities. Importantly, it can also reveal information about unpublished job opportunities<sup>4</sup>. Networking during a rotation is

certainly a desirable goal and should be considered if a student has a specific practice location in mind.

Whether a clinical experience is chosen for an anticipated specialty, geography, or by random chance, housing at that site becomes a critical concern after the sites have been finalized. Although the MCO rotation website gives a wealth of information about each clinic, it offers precious little information about living arrangements. Generally, only two pieces of information are given: whether or not the facility provides housing and the approximate housing costs. Occasionally, even the housing costs are left out<sup>3</sup>. Historically, third year MCO students have been advised to consult with past interns. This word-of-mouth system is complicated by the fact that third year students may not know which students were assigned to the location of interest. Even if the proper contacts can be identified, it can be difficult to reach current and former interns, as they are no longer available on-site at MCO. While the MCO rotation website can answer a great many questions, it is critically lacking in detailed housing information. Our current word-of-mouth system runs the risk of failing many third year students. This project aims to meet the needs of MCO third year students by gathering and publishing externship housing information from former MCO classes. It is hoped that organizing the housing information and creating a forum for sharing the interns' insights will allow future MCO classes to make informed decisions during the externship selection process, as well as easing any anxiety that may occur when faced with moving to an unfamiliar location.

## METHODS

In order to obtain detailed information about housing during the fourth year clinical externships, the Michigan College of Optometry Housing Survey was written. This survey instrument appears as Appendix A. The survey was submitted to and approved by the Ferris State University Institutional Review Board. This approval document appears as Appendix B. The Michigan College of Optometry Housing survey was distributed to all 108 members of MCO's graduating classes from 2009, 2010, and 2011 via email with the assistance of the Secretary to the Associate Dean. The survey asked individuals to provide information concerning the rotation location, place of residence (home/family, house, apartment, or other), name of the apartment (if applicable), the monthly rent, the approximate cost of monthly utilities, the lease term, the length of commute, recommendation to other interns, and other comments for each of the three semesters. The completed survey forms were to be emailed back to the first author of this paper within three weeks of receipt. The gathered information was organized and presented in this report, as well as being published via a Facebook group that is open to the public, with particular interest in dissemination to third year MCO students for use during the rotation selection process and fourth year externships.



## RESULTS

Of the 108 surveys that were distributed to the MCO graduating classes of 2009, 2010, and 2011, 35 were completed and returned. This represents a 32.4% response rate. Of the Class of 2009, 5 out of 36, or 13.9%, participated. Seven out of the 39 members of the Class of 2010, or 17.9%, responded. Participation for the Class of 2011 was 69.7%, with 23 out of 33 members participating. Overall, responses of Classes of 2009, 2010, and 2011 comprised 14.3%, 20.0%, and 65.7% of the data, respectively.

The data was analyzed with particular attention being paid to information that would be germane to available rental properties. The percentage of responding interns renting or living with family or friends was calculated for each clinical site. The average cost of living was calculated. This report defined cost of living as the sum of the monthly rent and the utility costs. The average commute time was calculated. When available, the names of the apartment complexes where interns resided were listed. The recommendations of the interns were considered when listing the complexes, and all should be assumed to be recommended to future students, unless otherwise indicated. The analyzed data for each location was organized into a table format for easy reference. These are available as Tables 1-28, below.

A Facebook group entitled “Michigan College of Optometry Externship Housing Information” was created and left open to the public for easy reference for future MCO interns. Tables 1-28 appear in that forum.

Table 1. Aleda Lutz VAMC

Location	Saginaw, MI
Respondents renting	40%
Respondents living with family/friends	60%
Average monthly cost of living (rent and utilities)	\$663.00
Average commute time	22 minutes
Apartment complexes patronized	Green Acres Village Apartments Fox Glen

Table 2. Andersen Eye Care

Location	Saginaw, MI
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	30 minutes
Apartment complexes patronized	Not Available

Table 3. Balian Eye Center

Location	Rochester Hills, MI
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	43 minutes
Apartment complexes patronized	Not Available

Table 4. Battle Creek VAMC

Location	Battle Creek, MI
Respondents renting	13%
Respondents living with family/friends	87%
Average monthly cost of living (rent and utilities)	\$302
Average commute time	42 minutes
Apartment complex patronized	The Pointe at Western

Table 5. Boling Vision Center

Location	Elkhart, IN and Goshen, IN
Respondents renting	33%
Respondents living with family/friends	67%
Average monthly cost of living (rent and utilities)	\$640
Average commute time	32 minutes
Apartment complexes patronized	Mill Creek Apartments Arbor Lakes Apartments

Table 6. Cherry Street Health Services

Location	Grand Rapids, MI
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$750
Average commute time	75 minutes
Apartment complexes patronized	Not Available

Table 7. John Dingell VAMC

Location	Detroit, MI
Respondents renting	60%
Respondents living with family/friends	40%
Average monthly cost of living (rent and utilities)	\$811
Average commute time	27 minutes
Apartment complexes patronized	Lafayette Towers
	The Pavilion
	Saddle Creek (not recommended)

Table 8. Dorn VAMC

Location	Columbia, SC
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$479
Average commute time	6 minutes
Apartment complex patronized	Hampton Green Apartments

Table 9. Duane Waters Hospital

Location	Jackson, MI
Respondents renting	60%
Respondents living with family/friends	40%
Average monthly cost of living (rent and utilities)	\$433
Average commute time	13 minutes
Apartment complexes patronized	Gallery Place Apartments
	Springbrook Meadows

Table 10. Eaton Rapids Optometry

Location	Eaton Rapids, MI
Respondents renting	60%
Respondents living with family/friends	40%
Average monthly cost of living (rent and utilities)	\$420
Average commute time	12 minutes
Apartment complex patronized	Practice-owned apartment
	Evergreen Apartment

Table 11. Eglin Air Force Base

Location	Ft. Walton Beach, FL
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$697
Average commute time	17 minutes
Apartment complex patronized	Falcon House Apartments

Table 12. Eyecare Associates of Lee's Summit

Location	Lee's Summit, MO
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$678
Average commute time	5 minutes
Apartment complex patronized	Practice-owned house

Table 13. Garrett Eye Centers

Location	Iron Mountain, MI and Escanaba, MI
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	8 minutes
Apartment complexes patronized	Not Available

Table 14. Grand Rapids Ophthalmology and Art Optical

Location	Cutlerville, MI and Grand Rapids, MI
Respondents renting	50%
Respondents living with family/friends	50%
Average monthly cost of living (rent and utilities)	\$800
Average commute time	40 minutes
Apartment complexes patronized	Not Available

Table 15. Grand Rapids VAMC

Location	Grand Rapids, MI
Respondents renting	75%
Respondents living with family/friends	25%
Average monthly cost of living (rent and utilities)	\$650
Average commute time	43 minutes
Apartment complex patronized	Not Available

Table 16. Henry Ford Optimeyes

Location	West Bloomfield, MI
Respondents renting	50%
Respondents living with family/friends	50%
Average monthly cost of living (rent and utilities)	\$614
Average commute time	20 minutes
Apartment complex patronized	Bloomfield on the Green Apartments

Table 17. Holt Eye Care

Location	East Lansing, MI
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	10 minutes
Apartment complexes patronized	Not Available

Table 18. Kresge Eye Institute

Location	Detroit, MI
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	45 minutes
Apartment complexes patronized	Not Available

Table 19. Lakeshore Eye Care

Location	Norton Shores, MI
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$795
Average commute time	60 minutes
Apartment complexes patronized	Not Available

Table 20. Lansing Ophthalmology

Location	East Lansing, MI
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$800
Average commute time	15 minutes
Apartment complex patronized	Tammany on the Ponds

Table 21. Michigan College of Optometry

Location	Big Rapids, MI
Respondents renting	80%
Respondents living with family/friends	20%
Average monthly cost of living (rent and utilities)	\$600.25
Average commute time	5.6 minutes
Apartment complexes patronized	University Park Suites
	Ferris State University Residence Halls

Table 22. National Naval Medical Center

Location	Bethesda, MD
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$650
Average commute time	40 minutes
Apartment complexes patronized	Not Available

Table 23. Pawnee Indian Health Service

Location	Pawnee, OK
Respondents renting	100%
Respondents living with family/friends	0%
Average monthly cost of living (rent and utilities)	\$950
Average commute time	60 minutes
Apartment complex patronized	House arranged by site

Table 24. Shoreline Vision

Location	Muskegon, MI
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	90 minutes
Apartment complexes patronized	Not Available

Table 25. Special Needs Vision Clinic

Location	Saginaw, MI
Respondents renting	50%
Respondents living with family/friends	50%
Average monthly cost of living (rent and utilities)	\$650
Average commute time	70 minutes
Apartment complexes patronized	Pheasant Run Manor Apartments (not recommended)

Table 26. VA Black Hills HCS (2010-2011 Alternate Site)

Location	Ft. Meade, SD
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	25 minutes
Apartment complexes patronized	Not Available

Table 27. VA Northern Indiana Healthcare Systems

Location	Ft. Wayne, IN
Respondents renting	75%
Respondents living with family/friends	25%
Average monthly cost of living (rent and utilities)	\$518
Average commute time	13 minutes
Apartment complexes patronized	West Wind Apartments Canterbury Green

Table 28. WOW Vision Therapy and Great Lakes Eye Care

Location	St. Joseph, MI
Respondents renting	0%
Respondents living with family/friends	100%
Average monthly cost of living (rent and utilities)	Not Available
Average commute time	6 minutes
Apartment complexes patronized	Not Available

## DISCUSSION

This project was designed to gather housing information from optometrists who had completed externships at clinics affiliated with Michigan College of Optometry. It would be desirable to offer details on living arrangements at all available sites for a given academic year. The Michigan College of Optometry Externship Housing Survey project successfully acquired information on housing at 28 clinical opportunities from the Classes of 2009, 2010, and 2011. The overall response rate was 35 out of 108 surveys, or 32.4%, which is on par with the anticipated 36.83% response rate for email surveys<sup>5</sup>. Due to the public availability of this information through the “Michigan College of Optometry Externship Housing Information” group on Facebook, there will be an immediate advantage to the Class of 2012 as they consider housing options prior to beginning their first externship. The Classes of 2013 and beyond will have a greater benefit from this project, as the information will be available to them prior to the beginning of rotation selection process.

Three graduating classes were selected to increase the likelihood that most of the available externship clinics would be represented in the survey responses. Including only one or two classes could mean that multiple sites could be omitted, to the detriment of future classes. It was also decided that requesting this information data from optometrists who had graduated three or more years ago would prove challenging. Analysis of the surveys demonstrated an inversely proportional relationship between survey response rate and time elapsed since graduation. The response rate was highest in the Class of 2011, with 69.7% of the members participating. The lowest response rate was in the Class of



2009, with 13.9% of the class participating. It is likely that the Class of 2008 would offer even less participation.

In addition to expecting poor participation, the graduating classes of 2008 and prior were omitted due the likelihood of incomplete, inaccurate, and possibly irrelevant data. With the administration of Michigan College of Optometry striving to offer the best clinical experiences possible, there is some variation in the clinics that are offered each year. Because of this possible variation, it was decided that polling optometrists who had graduated over two years ago was likely to include some sites that are no longer available. Further, these optometrists are less likely to remember as much detail about their living arrangements as this survey requested.

Possibly the most important factor that differentiates the response rates by class is the availability of current contact information. The Office of the Associate Dean has current contact information and email addresses for all members of the Class of 2011. It is not mandatory that the Classes of 2009 and 2010 keep current contact information and email addresses on file. This information is requested, but it is likely that fewer and fewer members of the graduating classes keep in good contact with their alma mater as time elapsed since graduation increases.

As the authors of this project lack the administrative privileges to update the Fourth-Year Rotation website, Facebook was chosen as the arena for publishing the results for immediate use by the Class of 2012. The creation of the “Michigan College of Optometry Externship Housing Information” Facebook group has many benefits for disseminating the information gathered by this survey. The vast majority of MCO students have access to Facebook. Even if they are not currently members of Facebook,

membership is free and registration takes only a few moments. The group was left open to the public, so it is not necessary to join the group in order to read the information posted on the Wall. All of the information was posted in separate posts organized by rotation site, making it easy to find the locations that an individual is curious about. Also, future students can add to the Wall posts and keep the information as up-to-date as they desire. Students are less likely to post on the Wall of a Facebook group than to respond to a survey included in a FerrisConnect class or as part of a senior project, but it does create a forum that is open for new information to be shared as soon as it is available. The Facebook group does not eliminate the need for a formal continuation of this survey. It can serve as an easily accessible information source in the interim of formal publication of future survey results by either the administration of MCO or future students.

During the data analysis process, flaws were identified in the wording of the survey. It was not uncommon for students to report renting an apartment or a house, but then comment that they had sublet from an acquaintance and that that living arrangement would not be available for future interns. To eliminate the representing specific apartment complexes as being welcoming of short-term leases when a short-term lease was only available as a sublease, the responses were adjusted accordingly. That is, if an intern had reported subletting an apartment or a house that would not be available, the response was reclassified as living with family and friends. This project aimed to give future interns an idea of where they could reasonably expect to find rental opportunities at each geographic location. Including unavailable housing suggestions would have undermined this goal, so the responses were uniformly adjusted to better meet this goal.

Any future studies should include a box for “Sublease” when asking for a description of the housing type to eliminate this ambiguity.

To complicate this issue further, the reported rent and utilities listed by those living with family or friends or in a sublease arrangement were often outliers when compared to the rental information in the same location. The rent and utility costs associated with those subleasing and living with family were not included in the cost of living calculation. Including figures that appeared uncharacteristically low would only serve to lower the apparent cost of living in a particular location. The risk of a student dismissing an appropriately priced rental opportunity based on the results of this survey alone is minimal. Students may, however, spend more time searching for housing costs that fall in line with the reported average. The purpose of providing the average cost of living is to be representative of the area, not to cause the extern time as he realizes that the figure was not representative of reality.

The directions of the survey asked students to skip the rest of the questions after responding that they had rented from family or friends. In multiple cases, interns reported paying rent while in these situations. The rent costs typically were much lower than rent costs in formal rental arrangements in the same location. Therefore, these rent and utility figures were not used in the cost of living calculation. The purpose of these averages was to give the third year students a realistic idea of what they would have to pay as a renter, as well as ideas of where they could find housing.

The method for handling data on commuting warrants some discussion. When writing the survey, the issue of whether to request information on travel time or distance traveled had to be considered. The authors opted to address this issue in terms of

commuting time rather than distance because travel factors at each rotation locations can be so variable. Interns to National Naval Medical Center in Bethesda, MD, for example are more likely to travel by public transportation than are interns from Aleda Lutz VAMC in Saginaw, MI. Traffic patterns and population densities in Iron Mountain, MI (Garrett Eye Center) and Detroit, MI (John Dingell VAMC and Kresge Eye Institute) are extremely different. Mileage traveled in one setting and by one mode of transportation may not give a student a good idea of what to expect on a daily basis. Time, however, is a unit of measure that is consistent between these settings. Interns should reasonably expect the commutes to be variable, but the authors deemed time a better representation of the differences in the commute at each location than was distance.

Contrary to efforts to minimize the influence of those subleasing or living with family on the rental data, it was deemed appropriate to include their responses when calculating the average commute time at each represented site. Whether an intern is renting or living with family, he will have to travel some distance to the clinic site. It appears that many interns traded short travel times for the social and economic benefits of living with friends and family. When living with family, it is more likely that that commute time is exaggerated because cost and comfort have potentially won out over the convenience of living as close to the clinic as possible. It is preferable to overestimate commute time rather than underestimate it.

Another flaw in the survey instrument was the question concerning lease term. This item was left as an open-ended question that was worded: "Length (months) of lease." Data analysis suggested that many students had a basic misunderstanding of the crux of this stem. Data concerning lease terms were disregarded. Multiple students had

mentioned sharing a full year lease with other externs, but reported that they only had a 4 month lease. The most common response to this question was 4 months, so it is likely that the respondents understood the question to have asked the duration of the rotation. Many of the individuals responding “4 months”, however, commented that they had split an annual lease with other interns at the site. The reported responses were, therefore, non-sequitur, and the wording of this stem was deemed ambiguous. Data regarding lease had to be disregarded in case others had interpreted the stem similarly, but had failed to comment on this matter. It can be difficult to find a short-term lease, so representing an area as welcoming of these can cause undue distress on individuals trying to procure housing. Future versions of this survey should strongly consider revising this stem. It would be appropriate to provide guidance in the form of boxes to be checked, as in the stem regarding housing types. The stem could simply read “Lease term” with check boxes that could include: “None”, “Monthly”, “3 months”, “6 months”, “Annual”, and “Other (specify)”. It could also be informative to explore additional facets of leases that students may encounter. Another stem to be considered would be “Lease Comments” with check boxes to indicate if additional fees applied, if the lease had to be terminated early, or if the lease was split with other interns. This revision would get more to the heart of the issue at hand: whether or not short-term leases are readily available in a particular area.

The survey respondents were asked to indicate whether or not they would recommend that particular housing situation to future interns. The responses received demonstrated some level of complications. This stem was aimed at renters to help students avoid apartments that were overpriced, seemed unsafe, or had poor management.

Many participants who had stated they lived with family or friends responded to the question. This group both would and would not recommend living at home, occasionally offering that the housing was not available or, in one instance, that “Living at home rocks!” In many cases, renters offered no recommendation either way. The point of this question was to give insight on which apartment complexes should be avoided by future interns. Only the recommendations against a specific apartment complex were deemed appropriate for inclusion. Only one apartment complex received a discouraging report, so it was assumed that all other apartment complexes were recommended to future interns. In Tables 1-28, the patronize apartment complexes can be assumed to be recommended by the students, unless otherwise noted.

Because the information gathered by this project has the potential to be so helpful to students both during the rotation selection process and while looking for available housing at the assigned externship sites, it would be prudent to try to maintain the Michigan College of Optometry Externship Housing Survey. The authors suggest revisiting this project at least every three years in order to keep the responses both as accurate and relevant as possible. Continuing this project, however, will allow the opportunity to improve the survey itself and ensure the responses more precisely answer the study questions. The analysis of the responses to the Michigan College of Optometry Housing Survey suggested that much could be done to improve the survey instrument itself. The specifics were outlined above during the discussion of the specific question stems. A new survey instrument was written to reflect this better understanding of how respondents will interpret the stems; it appears as Appendix C. The suggested revised survey instrument is projected that the survey respondents would find the new questions

less ambiguous, and the responses will more clearly answer the aims of the study. If this project is revisited in the future, the authors would be well-advised to consult Appendix C when designing their survey in order to benefit from the challenges encountered in this study.

In addition to improving the survey instrument, a future direction for this project could be to improve the method of survey distribution to improve the overall response rate. Although the Michigan College of Optometry Externship Housing survey garnered a response rate that was very similar to the expected rate for an email survey (32.4% vs. 36.83%<sup>5</sup>, respectively), changing the distribution method offers a tangible way of increasing participation in the future if the students or administration of MCO are interesting in continuing this project. A very simple way to do this would be to make it available on FerrisConnect as a part of OPTM 811, 812, and 813. Having it be available each semester would remind students to complete the survey while they are actually living in each location, allowing for the most accurate responses possible. As a part of OPTM 811, 812, and 813, the administration has the opportunity to ensure 100% participation by making the survey into a class assignment, such as the required wall posts. One of the goals of OPTM 811, 812, and 813 is to keep the fourth year students in contact with MCO. The MCO website states, “Using the WebCT course management software (FerrisConnect), year-long on-line seminar courses connect all on and off campus faculty and interns, provide a way to connect and communicate in discussions and case presentations, provide feedback in a timely manner, and provide a method of dispersing and receiving administrative information.<sup>1</sup>” Participating in a project such as

the Michigan College of Optometry Rotation Housing Survey clearly falls into the category of dispersing and receiving administrative information.

The utilization of FerrisConnect may be a more judicious approach than the email-based survey that was undertaken. Not only is it reasonable to expect a better, possibly up to 100%, response rate that represents all rotation sites, but the information would be even more timely. Interns within the same year could potentially see where their colleagues had lived a semester or two immediately prior if a wall posting assignment were deemed appropriate by the administration. Using FerrisConnect with the contemporaneous fourth year class also eliminates the risk of the Office of the Associate Dean not having current contact information for the polled demographic. If this project were to be taken on by the administration, then the results could easily be incorporated into the MCO rotation website and presented in a more formal setting than the Facebook group.

Despite flaws in the survey instrument, the aim of this research was clearly met. Tables delineating information about patronized housing at 28 clinical externship sites were published and are currently available for use by the Classes of 2012 and beyond. Because the flaws in the survey instrument were identified and recourses were explored, any future undertakings of this project will be better able to meet the ultimate research goals. Options for ways to continue this project have been outlined, and it can be hoped that the future classes of Michigan College of Optometry fourth year interns will benefit from the housing information provided for many years to come.



## REFERENCES

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APPENDIX A

MICHIGAN COLLEGE OF OPTOMETRY HOUSING SURVEY

Thank you for taking time to participate in the Michigan College of Optometry (MCO) Student Housing Survey 2011. This survey is meant acquire information on short-term rental housing available to students from the MCO while they are completing internship training at various locations around the country. Your responses are voluntary and completely anonymous. It should take approximately 5 minutes to complete the questionnaire. Please take a few minutes to fill out the survey with all the information you know or can remember.

If you have any questions regarding the results of the survey you may contact me, Mr. Tyler Cook, graduate student at the Michigan College of Optometry via e-mail: [cook65@ferris.edu](mailto:cook65@ferris.edu). If you have any concerns or complaints about the conduct of this study, you may contact Dr. Connie Meinholdt, Chair of the FSU Institutional Review Board – e-mail: [IRB@ferris.edu](mailto:IRB@ferris.edu) or phone: 231-591-2759.

You indicate your voluntary agreement to participate by completing and returning this questionnaire. Your privacy will be protected to the maximum extent allowable by law. Thank you for your assistance.

Please forward all completed survey's to Ms. April Jones @ [jonesa44@ferris.edu](mailto:jonesa44@ferris.edu) no later than Friday, March 18, 2011.



#### MCO Student Housing Survey 2011

Think of rental housing that you had while completing an internship in your area. Please estimate costs, conditions and other characteristics of these rental properties as accurately as possible for the 3 locations. If you stayed at home/with relatives/friends please also indicate that and disregard the remaining questions in that section.

Rotation Location #1:

Place of residence:  Home/Family  House  Apartment  Other

Name of Apartment:

Monthly Rent: \$

Approx. Monthly Utilities: \$

Length (months) of Lease:

Length (time – minutes) of Commute to Work:

Would you recommend this housing to other interns:  YES  NO

Other Comments:

Rotation Location #2:

Place of residence:  Home/Family  House  Apartment  Other

Name of Apartment:

Monthly Rent:\$

Approx. Monthly Utilities: \$

Length (months) of Lease:

Length (time - minutes) of Commute to Work:

Would you recommend this housing to other interns:  YES  NO

Other Comments:

Rotation Location #3:

Place of residence:  Home/Family  House  Apartment  Other

Name of Apartment:

Monthly Rent: \$

Approx. Monthly Utilities: \$

Length (months) of Lease:

Length (time – minutes) of Commute to Work:

Would you recommend this housing to other interns:  YES  NO

Other Comments:

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL

Institutional Review Board (IRB)  
Connie Meinholdt, Ph.D. - Chair  
820 Campus Drive  
Ferris State University  
Big Rapids, MI 49307  
(231) 591-2759

To: Dr. Robert Buckingham, Mr. Tyler Cook and Ms. April Jones  
From: C. Meinholdt, HSRC Chair  
Re: IRB\* Application #101202 (Title: MCO Rotation Housing Survey)  
Date: February 7<sup>th</sup>, 2011

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, "MCO Rotation Housing Survey" (#110106) and determined that it is exempt from committee review – 1C. This exemption has an expiration date three years from the date of this letter. As such, you may collect data according to procedures in your application until February 8<sup>th</sup>, 2014.

It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in this application. Your application has been assigned a project number (#110106) which you may wish to refer to in future applications involving the same research procedure.

Additionally, we wish to inform researchers that the IRB will begin requiring follow-up reports for all research projects approved after August 2011 as mandated by the Code of Federal Regulations, Title 45 for using human subjects in research. The follow-up report requirement may not affect this current project (#110106) if you have completed data collection prior to August 2011. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let me know if I can be of future assistance.

*\*Please note that the IRB has been referred to as the Human Subjects Research Committee (HSRC) and that we are in the process of revising our documents and procedures.*

APPENDIX C

SUGGESTED REVISED SURVEY INSTRUMENT

## MCO Externship Housing Survey

This survey is designed to give accurate information about housing options at the various rotation sites available to MCO fourth year students. Please recall your living arrangements during each of your fourth year clinical externships. Indicate whether you lived with family/friends, rented a house, rented an apartment, or subleased. Please estimate your commute time. For those renting, please complete all questions. For those living with family/friends or subleasing, please disregard questions 4-9. Thank you for completing the MCO Externship Housing Survey!

1. Name of Rotation Location #1:
2. Type of Housing:  Family/Friends  House  Apartment  Sublease  Other
3. Average Commute Time (minutes):

If renting during this rotation, please also answer the following questions:

4. Monthly Rent: \$
5. Approximate Monthly Utilities: \$
6. Lease Term:  None  Monthly  3 months  6 months  Annual  Other, please specify
7. Lease Comments:  Additional fees applied  Terminated early  Shared with other interns
8. Name of Apartment Complex (if applicable):
9. Would you recommend this housing to other interns:  YES  NO
10. Other Comments:

- 
1. Name of Rotation Location #2:
  2. Type of Housing:  Family/Friends  House  Apartment  Sublease  Other
  3. Average Commute Time (minutes):

If renting during this rotation, please also answer the following questions:

4. Monthly Rent: \$
5. Approximate Monthly Utilities: \$
6. Lease Term:  None  Monthly  3 months  6 months  Annual  Other, please specify
7. Lease Comments:  Additional fees applied  Terminated early  Shared with other interns
8. Name of Apartment Complex (if applicable):
9. Would you recommend this housing to other interns:  YES  NO
10. Other Comments:

- 
1. Name of Rotation Location #3:
  2. Type of Housing:  Family/Friends  House  Apartment  Sublease  Other
  3. Average Commute Time (minutes):

If renting during this rotation, please also answer the following questions:

4. Monthly Rent: \$
5. Approximate Monthly Utilities: \$
6. Lease Term:  None  Monthly  3 months  6 months  Annual  Other, please specify
7. Lease Comments:  Additional fees applied  Terminated early  Shared with other interns
8. Name of Apartment Complex (if applicable):
9. Would you recommend this housing to other interns:  YES  NO
10. Other Comments: