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CATEGORY ARCHIVES: MEASURING AND IMPROVING RURAL FOOD AND PHYSICAL ACTIVITY ENVIRONMENTS TO IMPROVE HEALTH

Chapter 12: The Final Days

Posted on **August 24, 2015** by **Beining Niu**

My last three days of interning consisted of many CCE-related tasks. Leah and Judy were gracious enough to find a tri-fold poster that I could use for the internship presentation. I measured the dimensions of the poster, created a PowerPoint template of the correct size, and began creating my poster.

My poster contains sections on background, tool development, the analysis plan, and further steps relating to iCHART. In addition, there is a sample of the tool, and a section describing the 6-month data collected from the HEART Club project. Since I worked on two different projects this summer, I had trouble integrating the projects into one cohesive poster at first. However, eventually I realized that the projects are connected on a higher, meaning-based level: iCHART is necessary for identifying what a community does and does not have, while HEART Clubs take action to address what communities don't have or bring attention to the unused assets in a town. Thus, HEART Clubs are a natural next step to the iCHART work, and the work blended seamlessly (I hope) into the poster presentation.

Friday, my very last day, was also the first day of Cornell's freshman orientation. Cornell Cooperative Extension had a table in Barton Hall, where students went to pick up their ID cards and browse some of the organizations affiliated with Cornell. I spent two hours "tabling" (basically, standing at the table and giving information to anyone that stopped by) with Kim, a CCE staff member working in administration.



Talking to students and families at the CCE booth! The person next to me is Lauren, another CCE summer intern.

Surprisingly, I met many students and families affiliated with Extension. Some of the students had volunteered in their local 4-H program, or food-related community program, during high school. Other students had family members that worked in the Extension program as either educators or directors. I saw the close connections that Cooperative Extension creates, both in personal relationships and project goals, and was excited to see how big of an influence this program has! I was glad to be part of such a wide-reaching and goal-oriented organization this summer.

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Chapter 11: Working with Data

Posted on **August 10, 2015** by **Beining Niu**

Lots of data progress problems happened this week! Even though working with the data was slow, the issues I encountered helped me to think more deeply and to learn more about the programs I was using. My main problem was with the structure of the data entry in SPSS. In the past, some of my lab-mates have used a “wide” format by listing the variables across the page (as the column labels) and inputting data from different observers or different times down the rows. However, I had learned how to find inter-rater and test-retest reliability by placing the observers as the variables names (the “long” format). That way, the observations from the two people can be compared by making a matrix of the two variables and computing using information about how many of the observations match.

When I went to office hours for Lynn, a statistical consultant, she told me that there is a way to restructure the data by essentially flipping the table from a long to a wide format, or vice versa. I left her office confident that I could figure out how to do this through Google, but the process was more complicated than I thought. I’m not going to go into details, since it is difficult to understand without visualizing, but it was pretty confusing. After some more research, I decided to input the data the way that I learned to. However, data entry became less of a problem

because...

...the timeline of our project changed. Since testing and refining the tool took longer than we had anticipated, and since the schedules of the testers did not always align, we did not visit as many stores in the summer as we had planned. Since Rachel was leaving for the summer, and since I would not have a car at the very end of the summer, we decided to postpone testing until the fall. Since I will be working on a different project during the fall semester (it involved Montana, a state I've always been interested in!), we are not sure if I will be conducting the field tests anymore. However, I would still love to work with the data, so we'll see what ends up happening!

Changing the subject: during the course of this week, Urshila and I sat down to review my literature review. She gave me lots of helpful comments and suggestions, and I got to explain my point of view to her as well. I spent the week editing the paper, and gave Urshila a fresh new copy of it to read at the end of the week.

Also during this week, I started learning NVivo, a qualitative data analysis software that I will be using for some of the HEART Club/Montana study data. I enjoyed watching instructional videos for the software, but ran into some problems when I tried to access NVivo on my CISER account. This problem is still being resolved, but I hope I will be able to experiment with NVivo soon!

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Chapter 10: First Official Tool Test

Posted on **August 3, 2015** by **Beining Niu**

Originally, our team planned to start officially testing the Food Environment Inventory for inter-rater reliability on Monday, July 27, but we ran into some formatting issues with the tool. Rachel and I ended up just fixing the tool on Monday, and postponed our tool test for Friday. Meanwhile, since we were editing the tool again, we found many other small things to change, such as the types of frozen fruit or the wording of a description in the codebook. I have to admit, working on the tool with a group could get arduous at times, because we spent a lot of time sending the changes to each other and ironing out miscommunication. However, I am very pleased with the final result. Throughout this process, I realized that the tool would not be as good as it is without multiple discussions and input from people with different points of view. At the end of the day, I would say that the tool turned out well as a result of our passionate yet respectful group work.

With tool testing set aside for the time being, I started working on more HEART Club-related tasks. I reviewed a transcription that I wasn't able to hear well in the past, and was able to add words that had been inaudible to me before. I also created a concept table for the final survey that each HEART Club member completes. This concept table has everything in one place – coding keys, sources, notes, and more. Finally, I read a paper written by Dr. Seguin in the past, which details the Change Clubs that she implemented and collected data from before the

HEART Club project began. Urshila told me that she would like my help writing a HEART Club paper similar to this Change Club piece, which is a huge and exciting honor, so I read the paper with zeal (okay, I'm being more cheesy than I need to be, but it's fun to be dramatic)!

Finally, Friday came, and Rachel and I headed out to Dryden, NY in the early afternoon. We first went to Dryden Food Market, also known as Clark's Shurfine Food Mart (don't ask me why those names are completely different). We decided that this store was probably the largest grocery store that we'd find in a rural town, since it had over 10 aisles, a bakery, and much more. It took us about an hour and a half to inventory the entire store. This process was exhausting but necessary. The fact that the store was so large meant that it had almost every item on the inventory, so Rachel and I got to see how each item of the tool held up in a larger store.



Dryden Food Market/Clark's Shurfine Food Mart

After the store with many names, we went to a convenience store called Express Mart. This store was much smaller, and much more characteristic of a typical rural town. Since it was so small, we filled out the inventory in half the time it took us to complete the other one!

The combination of stores that we visited gave Rachel and I a good glimpse of the range of places the tool can be applied in. We came back to Cornell ready to relax after a day of looking at food labels, yet pleased at the progress we had made.

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Chapter 9: A Week of Writing

Posted on **July 27, 2015** by **Beining Niu**

After conducting loads of background research, I was finally ready to write the body of my literature review. At first, I wasn't sure how to go about describing the articles, so I read some published literature reviews to get an idea of the format with which to present them. During the course of my writing, I had days where I felt stuck, but also days that felt very productive. As I read and reread the articles I chose, I started understanding the big picture better – I was able to recognize the trends, successes, and gaps in the current research on electronic tools. As I made connections in my head, I wrote them down and used them to make my paper flow.

Of course, not all of my ideas fit into the paper. After I finished writing a rough draft, I reviewed the entire document to make sure that I was clear, concise, and professional. I took out many sentences that were less relevant or made the paper confusing. I added new thoughts that I had, including a “next steps” section that incorporated ideas from the HEART Club study. When I finished my paper, I sent it to Urshila for review, and awaited her comments and suggestions.



The first two pages of my lit review! Changes will be made in the future.

During the times that I needed a break from my paper, I continued work on the iCHART and HEART Club projects. I met with Francoise, the statistician that helps more people than I could possibly keep track of, to confirm our analysis plan for iCHART. She gave me good tips on inputting data, and confirmed that our sample size and statistical coefficients were correct. With Francoise's approval, we were now ready to start inter-rater and test-retest reliability tests! Knowing this, I started planning for future reliability testing field visits by determining groups of stores to visit on the same trip. I found many stores within a 30-40 minute drive of campus, and began feeling excited at the prospect of visiting them.

Finally, toward the end of the week, I worked on a transcription of a second focus group recording from Factoryville. We hadn't had enough participants during the last Factoryville focus group to make a good sample, so Urshila had to call other members and conduct another focus group. This focus group recording was much easier to transcribe, because there was no air conditioning whirring in the background. I was excited that my transcription went smoothly and pretty efficiently.

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Chapter 8: Final Preparations

Posted on **July 20, 2015** by **Beining Niu**

This week was full of preparations for the next steps of two tasks I was working on. I did lots of reading, reviewing, and revising for both my literature review and the iCHART Food Environment Inventory tool in anticipation for the work that would be carried out in the coming weeks.

For iCHART, I met with Urshila and Rachel many times to go over final edits to the tool. I've talked about making "final edits" before in other posts, but these were **actually** the last edits! It's funny because as we kept looking at and testing the tool, we kept finding more things to change. By the end of this week, though, the changes we were making were so tiny (for example, making the borders of the tables different sizes) that we knew we were ready to test the tool soon.

For my literature review, I dove into finding articles that were very relevant to my topic. I discovered the Photovoice study, the NEAAT study, and the Stanford Healthy Neighborhood Discovery Tool, a progression that showed the progress that is being made in electronic built environment assessment. I then found two studies that used the Discovery Tool in different settings, which showed me the importance of having a tool that is adaptable to many environments and people groups. I also looked at the NEMS tool, particularly the study on corner stores where they adapted the tool for tablet use, as well as iSOPARC, an adaptation of the SOPARC recreation center tool. I found, printed, read, and annotated these articles, constantly looking at the reference sections for other resources I could use. I wrote up a guideline for how I would write my literature review, and tried to figure out how each study would fit into the grand scheme of things. Finally, I decided that I would focus on the reliability, applicability, and ease of use of all the electronic tools made to assess the food and physical activity environments, and started writing my paper.

During the rest of the time, I worked on transcriptions. While transcriptions used to be more stressful for me, by this time I was used to the process. I could tell that, with the help of the F4 transcription software, I was getting faster and more accurate with my transcriptions.

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Chapter 7: A Mishmash of Things

Posted on **July 13, 2015** by **Beining Niu**

This week was filled with a variety of different projects. It was the week that I realized how lucky I am to have a well-rounded experience in my internship so far!

On Monday, I was a part of another **HEART Club project call**. If you can recall, HEART Club project calls take place once a month, and are an opportunity for the different HEART Club leaders to update us and learn from each other. Between this project call and the one from June, I had visited most of these towns, met the club leaders and members, and transcribed their reflections on their projects, so I understood what they were saying a lot better this time around.

Throughout the week, I worked on a couple different tasks. To make things simpler, I will organize this post by task instead of by day.

Statistics – in the beginning of the week, I finished going through the videos and exercises in the SPSS workshop. I then made a new data sheet, inputted some of the trial data we gathered during our field visits, and ran the tests that we are planning to use. It felt satisfying to see that I could put my newly acquired SPSS skills to practical use, and even more that the coefficients I ran actually looked pretty good!

Transcription – since the previous week was so heavily focused on iCHART, I finally found time to transcribe the focus group and key informant interview that we conducted in Dolgeville the week before. It was tiring at times (especially because some people talk a lot!), but I'm thankful that I could use the F4 transcription software that my lab purchased. Otherwise, I would have spent a lot more time transcribing that week!

HEART Club project update – At the Dolgeville focus group, a member had asked if we could make a summary of all the accomplishments their HEART Club has had so far. We thought this was a good idea, so Urshila and I wrote up one-page reviews of each group. I chose to write about Factoryville, and enjoyed researching its history, looking through its project materials, and creating/designing a project update for them.

iCHART edits – at the meeting last Monday, we had decided to add new features to the Food Environment Inventory. I researched how other tools have asked raters to record these features, and created a draft of the questions for shelf placement and the snack food section. I also looked into smaller details, such as the lean point of ground beef. Yum.

Literature review – The task of writing a literature review had been floating in the background for a while now, but during this week, I really started searching for articles. I am creating a literature review of electronic tools that allow community members to assess their food and physical activity environments. There really isn't a lot of literature on this subject, so I spent a lot of time looking at article references, presentations, and websites to try to find them. By the end of this week, though, I had found a few articles that I knew I would use in my paper.

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Chapter 6: Community Walk, Meeting, then Vacation!

Posted on **July 6, 2015** by **Beining Niu**

My sixth week at work was a little out of the norm. I worked on Sunday and Monday, and then took a few days off for vacation with my family.

Around noon on Sunday, I walked to Urshila's apartment (which is conveniently a 5-minute walk from my church) to have lunch. She made me a delicious and nutritious lunch, and I even got to sample her homemade hummus! After lunch, we took a bus back to campus and picked up another Ithaca Carshare car. This time, we drove to Montour Falls, NY, one of the four towns in our HEART Club study, to participate in a community walk. Part of the Montour Falls group's project was to initiate and publicize walks on the Catherine Valley Trail, which runs right through their town. That day, Urshila and I walked the two-mile stretch with residents of all ages. Though it was lightly raining the whole time, I enjoyed listening to stories, learning about the surrounding towns, and even having discussions about the effects of the Affordable Care Act (I might have gotten a little too passionate about that). On the way home, we stopped by the **waterfall** that Montour Falls is known for, and I took some pictures!



The falls!

On Monday morning, I made some final changes to the Food Environment Inventory in order to prepare for a group meeting about the tool with Dr. Seguin, Leah, Urshila, and Rachel. During the meeting, we discussed important topics such as advertising, shelf placement, and snack foods. I found it really helpful to hear Dr. Seguin's thoughts, because I could tell that she has had years of experience in the field. Her insight provided more context for this project, and both her comments and Leah's inspired us to make more changes to the tool.

On Monday afternoon, I left Ithaca to go on vacation with my family! We went to Bar Harbor, Maine, and had a blast

exploring and eating good seafood. I loved spending the week, and Fourth of July weekend, with my wonderful family. 😊



On top of Cadillac Mountain with my siblings!

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Chapter 5: Lots of Traveling and a New Research Buddy!

Posted on **June 29, 2015** by **Beining Niu**

After an exciting weekend, which included a wedding for a lovely couple (the reception included contra dancing, how fun!) and teaching the little kids at my church for the first time (after which my toe got jumped on and super bloody, sorry if that was too much information), it was time for an eventful week at work.

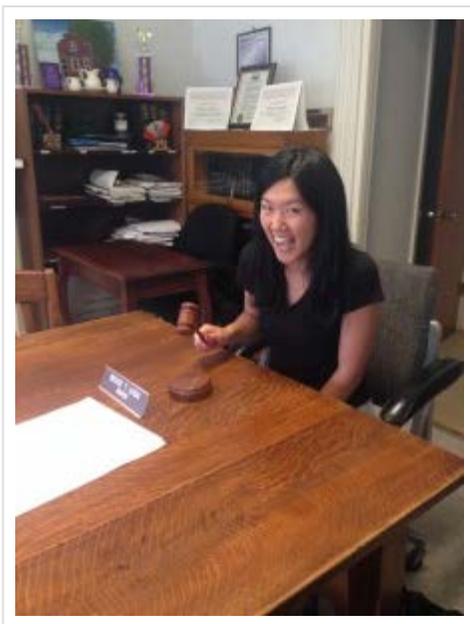
On Monday, I got up at 6:00 am in order to travel to a focus group and key informant interview in Dolgeville, NY. At 6:45, I met Urshila at an Ithaca Carshare parking space, and we drove 2.5 hours to Dolgeville. During the drive, we saw as many stunning views as cows – which means that the views were pretty great. We met the focus group in the Dolgeville town hall, and Urshila got to sit in the mayor's chair as she asked questions. The focus group participants were very animated, passionate, and wise. They updated us on the goals of their project, which has recently mushroomed into a large-scale development with quite a large fundraising goal. As usual, I felt both encouraged and motivated as I listened to the HEART Club members outline their recent escapades. Throughout the course of the interview, we also laughed about technological changes, heard deep quotations about the importance of group work, and exchanged ideas for how to recognize donors for the project. Now looking back, I

realize that this was a good interview because I never felt tired while transcribing it, which is a rare occurrence for any transcriber.



A great town with a great attitude about life!

After the focus group, Urshila and I walked to a Pizzeria and ate a delicious lunch there. Then, we drove to the office of Cornell Cooperative Extension of Herkimer County to meet Linda, the Extension educator that leads the Dolgeville HEART Club. Linda told many stories about her group, the new connections that it made, and the perfect timing that had to happen in order for each new development to fall into place. I could tell that she was a good leader by her organization, enthusiasm, and willingness to support her group members' ideas by "leading from behind."



I couldn't resist sitting in the mayor's chair – and later, Linda predicted this would happen!

On Tuesday, I met my fellow researcher on the iCHART project, Rachel, for the first time. She had worked on the project during the past semester, and had just come back to Ithaca for the summer to volunteer in the lab. As

Rachel and I discussed the tool, I learned about her perspective and discovered the reasoning behind many of her decisions. Throughout the week, we continued to look over and modify the tool, voicing our opinions as we went along. Through our collaboration, I was able to see the meaning of the phrase “strength in numbers,” because our different backgrounds, opinions, and focuses allowed us to make the tool well-rounded and easy for all kinds of people to understand and use. On top of the fact that I now had a co-worker, I was thankful for the presence of another student in the lab, and for the opportunity to meet a new friend.

On Wednesday, Professor Seguin and Urshila hosted a Webinar for Extension educators and others who were interested in the HEART Club project. It was fun for me to watch the seminar, contribute some answers, and ask questions about the project. The experience was also valuable because I got to hear about the prequel to the HEART Club project, the CHANCE Clubs that were part of another study, and thus grasp the purpose of the current project.

Throughout the middle of the week, I also continued learning SPSS, started transcribing the Dolgeville interviews, and made a plan for Friday’s field visit. That’s right – we did some more traveling this week!

On Friday, I picked up Urshila and Rachel, and we drove to Burdett, NY to visit a convenience store and a produce stand (but really, it was more than a produce stand – they had so much variety!). We filled out the Food Environment Inventories without a hassle. At the produce stand, called **Rolling Hills Produce**, which offers an amazing variety of locally grown or produced foods, the owners let us go into the greenhouses in the back to pick fresh tomatoes. It was lovely to be out in the field, both getting practical experience with the tool and meeting friendly, inspiring people!



Rolling Hills Produce, and some freshly picked cherry and grape tomatoes. Yummm.

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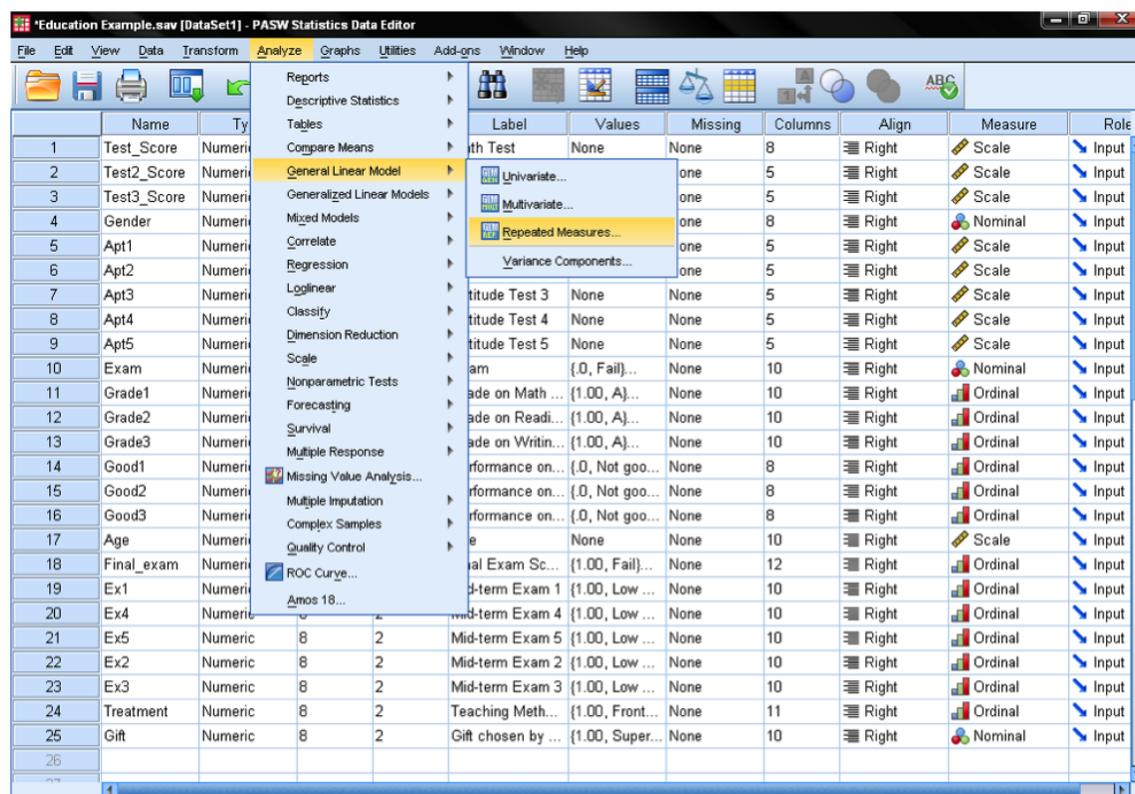
Chapter 4: Methods & Statistics

Posted on **June 22, 2015** by **Beining Niu**

During my fourth week, I started moving forward with the Food Environment Inventory by writing up a methodology proposal for determining inter-rater and test-retest reliability. In order to create this procedure, I conducted research on topics that I loved learning about! I read up on different types of reliability and validity, and why they are important. I looked at sample size and power to determine how many stores the research team should visit. I searched through lists of statistical coefficients with which to analyze the data (Cohen's kappa, Spearman's rho, and Intra-class correlation, to name a few). Toward the end of the week, the result of all of this research was a freshly printed paper, ready to be discussed with Urshila and later Francoise, the statistician that helps the Department of Nutritional Sciences with statistical analyses.

My meeting with Urshila went well – she was pleased with the proposal, and also brought up some points that I hadn't thought of. After the meeting, I revised the proposal. Then, I got to begin an exciting part of the project – data analysis!

...Well, kind of. I started by learning how to use SPSS, a statistical analysis software used heavily in the social science and health science fields. I had learned how to use STATA, another statistical software package, over the course of the previous semester, so it was interesting to see the similarities and differences between the two packages.



Here you

see one of the many windows necessary to use SPSS – there are so many different windows compared to STATA!

I started learning SPSS through an online workshop. I liked the teacher of the workshop, and solidified what I

learned through the exercises they gave. Starting to learn SPSS was probably the highlight of my work week!

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Chapter 3: Detours and Transcriptions

Posted on **June 15, 2015** by **Beining Niu**

After a busy weekend of moving into my new apartment (at long last!) and traveling to Syracuse for a concert, I started my work week with more fun and travelling – Urshila and I drove to Factoryville, Pennsylvania to conduct a focus group for their HEART Club members.

We planned to leave the office at 2:30 pm to get our rental car from the Cornell Fleet Services kiosk. At 2:00 pm, however, we heard a loud rumble outside and realized that it had started raining ridiculously hard outside. Nevertheless, we made the 30-minute walk (see our route here: <http://bit.ly/1H3QX7N>) in the pouring rain, and got completely soaked in the process. What a great bonding moment it was 😊

Throughout the course of the two-hour car ride, we slowly started drying off. However, the trials weren't done yet. We seemed to be following the storm as we drove on – there were times when we could barely see out the windshield because of the heavy rain. When we got into the state of Pennsylvania, we encountered various detours at all different locations. I got to practice my navigation skills each time we turned around because of a closed road. Finally, when we walked out of the car to our destination, we got soaking wet again – and then realized that it wasn't the right building.



This is maybe the fourth detour we ran into – so many adventures in one day!

When we finally met with the focus group, we had a lovely time chatting with the HEART Club members, and even ate a healthy, delicious dinner provided by the HEART Club leader. I learned a lot about their project, progress, challenges, and proudest moments. In addition, listening to them talk about their group made me realize the importance of teamwork, good leadership, and community awareness. I was in awe of how active the citizens of Factoryville are – they are always willing to pitch in on new projects to improve their community.

When we got back to Cornell that night, I was very glad to have experienced so much – and also very glad to be home. My first work trip was incredibly interesting, in terms of both content and crazy happenings. I don't think I will ever forget this day!

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For the rest of the week, I transcribed the focus group interview, as well as two other Key Informant interviews (interviews with the HEART Club leaders) that Urshila conducted. I discovered some good transcription software, and experienced some frustrating moments when it was hard for me to hear. I also modified the iCHART Food Environment Inventory and its codebook based on the changes we identified on our field visit the Friday before. Overall, it was a productive week full of all different kinds of experiences! I couldn't believe that so much had happened in such a short time.

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CATEGORY ARCHIVES: MEASURING AND IMPROVING RURAL FOOD AND PHYSICAL ACTIVITY ENVIRONMENTS TO IMPROVE HEALTH

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Chapter 2: Tool Revising and Testing

Posted on **June 8, 2015** by **Beining Niu**

During my second week at the lab, I started immersing myself in the projects. I found that I learned a lot of information very quickly just by talking about and working on the projects!

On Monday morning, I listened to a conference call with Leah, our lab coordinator, and finally got to hear from the four groups that are piloting the HEART Club project. Leah explained the projects that each of the groups are working on, and I got to see what they have accomplished so far. It was really interesting to hear the updates from the HEART Club leaders, who are all Extension educators in various counties. I was inspired to hear about the wonderful ideas people came up with and the progress the groups made despite encountering many roadblocks along the way.

During most of the second week, I worked on editing the codebook (basically an instruction manual) for the Food Environment Inventory part of our iCHART project. The codebook had been drafted a long time ago, and many changes had been made to the tool since that time. My job was to make the guide clear, succinct, and descriptive, so that people filling out the tool will know exactly what to do. I had three things going for me while working on this codebook. First, I had met Allie, a senior that worked on the Community Asset Inventory, the week before, and she graciously sent me the codebook she drafted for her inventory so that I could get an idea of what a finalized codebook looked like. Second, my graduate student, Urshila, told me about a wonderful tool called the NEMS-S tool, which also had an instruction guide I could access. Finally, I have competed in technical writing events all throughout my high school Science Olympiad days, and have always loved writing things in a way that other people understand. A combination of these three resources helped me to complete the Food Environment Inventory Codebook in an efficient and organized manner.

Friday was a special treat – Urshila and I went to two rural food stores to test the Food Environment Inventory tool. First, we drove to Speedsville General Store, which was about 30 minutes away from Cornell. At this convenience

store, we met some really nice people (and a really cute dog), one of which had just retired from her job at Cornell. I loved hearing their stories about their town and the people in it! They seemed to be very close to each other, like everybody was one big family. After completing the inventory in Speedsville, we traveled to Brookton's Market, a specialty store that sold a lot of healthy and organic foods. We filled out the inventory again, and then bought lunch at the store. I was surprised when the employees told us that we could eat outside and pay after we finished, but I loved the friendly, trusting atmosphere that created!



Brookton's Market. Image courtesy of livingindryden.org because I forgot to take a picture.

I had a wonderful experience visiting both of the rural towns, and was able to appreciate the friendliness and slower pace there. The two towns made me miss the culture of my town in Texas, the place where I grew up but haven't been back to in seven years. After coming home to Ithaca, Urshila and I sat down and discussed our reaction to our tool testing experience. We worked through some confusing directions, refined some of the categories, and discussed the goal of the tool. Through this experience, I learned so much more about the purpose and potential use of the tool I'm helping to develop. I also discovered that the food situation in rural towns is very different from what I imagined. There is often only one grocery (or convenience) store in the town, and larger supermarkets can be a good distance away. While some stores offered a large variety of healthy foods, the prices were usually significantly higher than supermarket prices. Our trip made me realize just how difficult it is for rural community members to eat healthy, and how important it is to strive to improve healthy eating and physical activity in rural towns.

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Introduction: Getting Ready

Posted on **June 1, 2015** by **Beining Niu**

During the summer of 2015, I will be working as an intern in Professor Seguin's lab in the Department of Nutritional Sciences. The internship is sponsored by the [Cornell Cooperative Extension program](#), which brings the groundbreaking research performed at Cornell University to the doorsteps of individuals and communities within New York State, and applies these research findings to improve people's physical, social, and economic outcomes.

My project is called "Measuring and Improving Rural Food and Physical Activity Environments to Improve Health," and I will be doing just that – developing and refining tools that will allow others to assess their town's food and physical activity resources. These assessments will allow people to become more aware of their town's assets, discover possible improvements they can make, and implement new policies that will better the lives of the people around them.

I was very excited to apply to, interview for, and accept this position, because it was the perfect opportunity for me to gain knowledge about the field of public health while actively doing work to help others. Also, it meant that I get to stay in Ithaca for the summer, which I've been told that everyone should do at least once!

During the second half of my spring semester, I started preparing for my internship in a couple different ways. First, I did research into the projects I would be working on, and other ongoing projects in Professor Seguin's lab. Then, I completed many online modules about human subject research, responsible conduct of research, and financial conflicts of interest through the [Collaborative Institutional Training Initiative](#). This training allowed me to gain IRB (Institutional Review Board) approval to conduct research. Finally, I finished a six-hour defensive driving course so that I could drive to different rural towns to conduct focus groups and view my projects in action over the summer. After I completed these things, I was finally ready to take a quick break (I went home for a week to see family and get my wisdom teeth removed) and dive into my internship!

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Chapter 1: Research and Project Details

Posted on **June 1, 2015** by **Beining Niu**

During my first week, I gained a firm foundation for the work I would be doing by reading, reading, and reading some more. I investigated the methods of conducting community-based research, looked at basically every food and physical activity inventory that has seen the light of day, and familiarized myself with the projects through scouring grant proposals and reviewing the work that has been done thus far.



Binders filled with lovely research materials

As a result of all this background research, I realized that I could actually articulate what I was working on — a task that I found pretty difficult during the weeks before, when I tried to explain to my friends and family what I would be doing this summer. So now that I can convey the details of the work I am doing, here is a bit of a background on the projects I am working on!

iCHART

iCHART stands for “inventories for Community Health Assessment in Rural Towns,” and represents a group of three objective tools that individuals in rural communities may use to assess their built environment. Of these three tools, the Community Asset Inventory has already been created and distributed, and offers a way to measure the presence, accessibility, and quality of the infrastructure, resources, and residences of a rural town. I am currently working on the Food Environment Inventory, which aims to measure the availability, quality, and accessibility of healthy foods in rural communities. The tool that I am working on is aimed toward all kinds of stores that sell food, from supermarkets to convenience stores (because sometimes, a town will only have a convenience store nearby) to concession stands (because we want this tool to be useful in a variety of circumstances). Finally, there is the Active Living Inventory, which is still in the works but will assess recreational facilities and walkability in rural towns. These three tools may be used together or separately, but they will all help improve the physical well-being of rural community members.

Why rural towns? Many of the existing tools (which can be found in the purple binders in the above picture) focus on urban centers, which are structured very differently from rural towns. The differences affect the applicability and usefulness of the existing tools. We hope to develop resources for people in rural towns in particular, who often have less access to fresh foods (one reason is that the turnover rate is too low, so fresh produce goes bad before it is sold) or safe sidewalks, among other things. When this project reaches completion, it is our goal that community members from any rural town can use the tools to gain awareness, start conversations, and initiate policy changes

in their area.

HEART Club

HEART stands for Healthy Eating and Activity in Rural Towns. This project guides community members through the process of making changes in the food and/or physical activity environments in their towns. The formation of HEART Clubs not only allows for creative, diverse types of resident-driven health initiatives, but also leads to greater civic engagement and builds the capacity of current extension educators.

The aim of each HEART Club is to develop an overarching goal or project, called the Noble Purpose, and then to achieve that goal through various steps, or benchmarks. The curriculum guides the clubs through activities that bring awareness to personal skills, encourage group cohesion, and increase knowledge about the town. In addition, the groups are given actions steps, such as stakeholder identification and pilot-testing their strategy, to help them achieve their goal as fully as possible.

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While I feel like I have a better grasp of the projects, I know that I still have a lot to learn. However, I am excited for this opportunity to immerse myself in these projects, learn how public health research is conducted, and contribute to the great work that is being done here at Cornell!

Posted in [**Measuring and Improving Rural Food and Physical Activity Environments to Improve Health**](#)
