The Composite Vehicle Research Center (CVRC) at MSU was opened in mid 2007 to serve an ever increasing need for composite structures for lightweight, environment-friendly, durable and safe vehicles. Under the leadership of Profs G. Cloud, E. Patterson, L. Drzal, D. Liu and A. Loos, the Center’s numerous post-doctoral and graduate employees work on advanced design of composite shells and structures for vehicles. They develop and use novel experimental mechanics methods and smart sensing systems for analysis, Non-destructive Evaluation, and structural health monitoring.

Every aspect of a composite material’s life cycle is studied at the CVRC. To start with, new raw materials are explored in the areas of 3 dimensionally integrated woven fabric reinforcements, focussing on their structural properties and ease, and method of manufacture. These new reinforcements are used in novel methods for the production of the final composite material to yield performance and manufacturing repeatability. The newly designed and produced composite materials are put through a barrage of tests to study their performance in different operating conditions. These include quasi-static modulus tests, low speed (drop weight), intermediate speed (gas gun) and ballistic (shock tube) impact tests, high speed camera footage, and a range of non-destructive optical testing methods. In parallel with the experimental work, the team develops analytical and computational based methods for predicting process parameters for manufacturing of, and damage progression in, the composite materials.

More information can be found at the Center’s website:
http://www.egr.msu.edu/cvrc/index.html

Two reviews from our Nomadic Nibblers
By Jon Kiel, Chemical Science master’s student
Searching for a restaurant that has good food, a unique and friendly atmosphere and fits into a graduate student budget can be a difficult task, but if you are searching for such a place, look no further than the Travelers Club International Restaurant and Tuba Museum. While the title is lengthy, it does justice to the restaurant’s overall ambiance and setting. With a dark, cozy dinning room dotted with tubas, sousaphones (hence the tuba museum) and a few other oddities the air is slightly European pub with a hint of Upper Peninsula.

The food ranges from sandwiches to entrees from cuisines spanning the globe. Every couple of weeks the specials change and these can vary from Alaskan baked salmon to Indian style curry. I’ve never been disappointed with a meal from the Traveler’s Club and coupling the changing menu with quite an impressive selection of beer, over 120 according to the website, always makes for an enjoyable lunch or dinner.

Sometimes the food is quite good, other times its just fine, but with its unique atmosphere, very friendly service and prices that range from a $7 sandwich to a $17 special entrée, the Traveler’s Club is a good time for everyone. Besides, if you don’t like the food, you can get an ice cream cone from the counter on your way out.

Story continued on page 2.
Parenting and Graduate School- There is Help!
By Laura Grabowski, Computer Science Engineering PhD student

Being a graduate student is a difficult, full-time job. So is being a parent. Many graduate students have to try to balance the demands of both of those jobs, and perform well at both jobs. This is no small feat, and can be a very daunting task. Graduate students who are also parents should know about some resources that can provide much-needed help and support with the issues that come along with those dual roles.

The MSU Family Resource Center (http://www.frc.msu.edu/) is a great place to start for information about the full range of family-related issues, from children’s activities around campus to where to turn for childcare when your child is ill. In addition to providing a centralized source of information, the MSU Family Resource Center also offers classes and events that relate to family issues.

Graduate student parents can feel overwhelmed and isolated with the sometimes competing demands of parenting and graduate study. To help counter those feelings is Student Parents on a Mission (SPOM). SPOM is a registered student organization that provides an opportunity to network with other MSU student parents and a forum for encouragement and support for student parents. SPOM meets on a regular monthly basis during the academic year. More information about SPOM can be found at http://www.msu.edu/user/studentp/.

Keeping the children entertained on a graduate student’s budget is yet another challenge. Fortunately, there are many family-friendly options available in the Lansing area at low or no cost. The Capital Area District Library (CADL) has branch locations throughout the Lansing area, and offers many free activities as well as loaning materials (see http://www.cadl.org/about/policy/cadl-library-card-policy for library card policies).

Local communities, including Lansing, East Lansing, and Meridian Township, offer activities and programs for a variety of ages at a very reasonable cost. The area is also dotted with many parks and recreational areas that are available for use by local residents. Area parks and recreation programs can be found online by searching for the parks and recreation department or division in your community.

There are many services and activities available to graduate student parents and their children that can help their lives just a little easier. As any parent knows, any little bit helps.

Links:
MSU Family Resource Center http://www.frc.msu.edu/
MSU Women’s Resource Center http://www.wrc.msu.edu/
Student Parents on a Mission (SPOM) https://www.msu.edu/~studentp/
Capital Area District Library http://www.cadl.org/
City of Lansing Parks and Recreation http://www.cityoflansingmi.com/
City of East Lansing http://www.cityofeastlansing.com/
Meridian Charter Township http://www.meridian.mi.us/

Travelers Club Restaurant Review
By Brad Hall, Materials Science Engineer master’s student

I doubt that one would ever be rushed by the staff. In fact, based on the staff’s interaction with others and me, it seems very patient and kind.

Prior to my visit I had heard good things about the food. The menu was very diverse, offering selections from places including India, Asia, and Mexico. More traditional American fare is also available. The food I ordered was something I had never tried anywhere before and did not quite meet my expectations.

Perhaps what was most exciting to me about Traveler’s Club was the beer selection. They offer a wide variety of beers from all over the world. Many of the beers listed were new to me, which is impressive considering that I have completed a World Beer Tour at Old Chicago. Though I did not peruse it closely, Traveler’s Club also offers a lengthy wine list.

Overall, I enjoyed my visit to the Traveler’s Club. Despite any minor complaints with my first meal there, I would like to try a few more items from the menu before making a conclusion about the food. Also, I would love to go back there with a couple good friends, unwind for a couple hours, and try a few more beers from across the globe.

Note: Travelers Club and Tuba Museum is faced with hard times and may be forced to close. Visit soon!

Talk back to us at; gradnews@egr.msu.edu
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