



UW Madison Science Camp

by Michelle Byholm

This past July, rural area high school students were given the opportunity to attend a UW Madison Science Camp. The camp provides students with an opportunity to work side by side with UW researchers in the area of regenerative biology. UW Madison is a research leader in this field and has been a large contributor to regenerative biology and other stem cell research.

Five students from Chequamegon High School - Ashley Casey, Robyn Chrouser, Jenna Marose, Chelsea Merten, and Miah Schmidt - attended the camp. The week-long camp included full-day activities with students spending most of their time in the lab completing experiments.

Over the course of the week at camp students were given a variety of real-life problems stem cell science has been researching. For example, one experiment had



students test heart cells. They worked with stem cells that were transformed into cardiomyocytes, or muscle cells in the heart, and watched them beat in a petri dish. In teams, students tested a variety of drugs on the heart cells and observed the results. From there they drew conclusions on which drugs would be more effective than others. Students also experimented with developing chicken embryos, helped divide stem cells, looked at DNA of a plant leaf, and viewed single molecules under a microscope.

The goal of the camp is to give students an idea of what life is like for a research scientist. The camp also provides several opportunities for students to get a taste of college life.

"The biggest part I got from the trip was how many different science fields there are and how people specialize in one of those fields for almost their entire career,"

said CHS junior Ashley Casey. "I would definitely recommend this to anyone who even thinks they might want to go into the science field in the future. It gave me a great idea of some possible fields I could go into and what working in a real lab is like."

"It was an amazing opportunity for me and for anyone who is interested in science. While on the trip we replicated stem cells, studied chicken embryos and how they develop, and we even got to go to the Chemistry Building and look at single molecules under a microscope," shared CHS junior Robyn Chrouser (pictured above).

The camp is sponsored by the Morgridge Institute for Research along with the Wisconsin Rural Schools Alliance. The camp provides everything, including lodging, at no cost, because of the support and planning of the outreach coordinators from the Morgridge Institute.

The camp not only gives students a taste for science and college, it also provides teachers with a chance to bring these new discoveries in science back to their classrooms. Each day, teachers are pulled aside to discuss how to implement experiments students are involved in.

"At this camp I met new people and made connections with people around the state. I also talked to many people that have careers in the field I want to go into. I got a lot of information from this experience about science and Madison that I will use later in life at college," CHS junior Miah Schmidt summed it up after the trip (pictured below).



Measure of Academic Progress Assessment

by Marilyn Brink

In September, all students in the district participated in the Measure of Academic Progress (MAP) or MAP for Primary Grades assessment. Both assessments are computer adaptive interim assessments. The MAP assessments adapt throughout the test in response to student performance. A correct answer generates a more difficult test item; an incorrect answer, an easier one. The testing process creates a grade-independent RIT (Rasch Unit) score, which indicates the level of question difficulty a given student is capable of answering correctly about 50% of the time. Teachers use each student's MAP data to differentiate instruction, set student goals, and track student achievement growth.

The MAP assessments will be given to students three times per school year. The data from the three assessment periods will be used as a universal screening tool in our Response to Intervention (RtI) system to identify students who are at risk of academic failure. In addition, the data will allow students, parents, and teachers to track a student's academic growth. The RIT score is a scaled score (like a tape measure) and can be used to determine growth over time, beginning of school year to the end and from grade to grade. Data will also be used to compare and contrast student and school performance with MAP norms. The norms are established by Northwest Evaluation Association (NWEA) MAP research based on a nationally representative sample of MAP test scores from over ten million students.

In addition to the big picture data, the MAP for Primary Grades provides teachers with the option of assessing specific skills. The Skills Checklists assess single skill-sets such as phonological awareness, phonics, numeracy and computation. Teachers are then able to use this diagnostic information to target an intervention for a student.

MAP