



PHOTO BY JIM ANDERSON

Savannah Porsche, Claire Landon and Parker Warren looking at the world of tiny things through new microscopes.

Foundation provides microscopes

By Jim Anderson
Correspondent

In order for a student to go out into the world thinking big, he or she sometimes finds it necessary to take a really good look at the tiny things in life. One of the best methods for doing that is to use a microscope, and last week the Sisters High School students in Rima Givot's science class were at it up to their ears — a few of them even pulling their hair(s) out.

The students had water from a pond, old pieces of newspaper tissue, roots of plants, blood slides and other stuff to look at, including pieces of human hair; their own, that is.

The microscopes the students were using were made available through the wonderful events that take place when a community and a school system get together and give it their all. There's just no way a school system can afford to buy everything they need to make their educational system work perfectly — so everyone in the community pitches in.

The Sisters Schools Foundation is the bucket that stores the monetary contributions offered by members of the community. The Sisters Science Club, and donations from individuals and other foundations, keep the bucket filled so teachers can withdraw the funds for tools they need to do their job better.

Rima Givot, the SHS science/biology teacher, asked for and received 18 Lieder microscopes with swivel heads. The swivel heads make it possible for two or more students to use the same scope just by swiveling the head around so all can see the specimen under investigation.

Givot uses the scopes for a great deal of her biological investigations, even to teaching blood work with prepared slides from biological supply sources.

"I have been so excited to see the biology students become proficient at using the microscopes," she said. "They have been exploring and comparing different types of cells, relating structure to function in the larger organisms where the cells originate. The microscopes have been working really well. They were new last year, purchased with a grant thanks to the Sisters Schools Foundation and the Sisters Science Club."

One of Givot's students who was so caught up in the

new adventure of using a scope had this to say about his first look at a typical garden veggie:

"The cells in an onion root contain a cell wall, cell membrane, cytoplasm, nucleus, nucleolus, a large vacuole, and other parts we can see with our microscopes.

"The cells are shaped like bricks all pushed together. An onion bulb, which is white since it grows underground and it doesn't have sunlight to provide energy to the chloroplasts, is made up of layers, which are almost in a brick-like shape being pushed together just like their cells. They don't have chloroplasts because they grow underground, in which sunlight is not able to reach them."





CFK – Cardio Fit Kickboxing Classes #134301

Sherri Hermens is back teaching cardio fit kickboxing for SPRD. Sherri holds a USAT 3rd Degree Black Belt in taekwondo and comes with 17 years of martial arts experience. Get your cardio fit workout with this kickboxing class. Ongoing Tu/Th | 4–5 pm | SPRD \$44 | \$7 drop-in

View activities & classes, and register online!

www.SistersRecreation.com

1750 W. McKinney Butte Rd. | 541-549-2091



- State-of-the-art Security Technology
- Sizes from 5x5 to 12x40
- Individual Gate Codes
- Long-term Discounts
- On-site Manager

Sisters Industrial Park
157 Sisters Park Dr. • 541-549-3575
www.SistersStorage.com

Alpine skiers race under perfect conditions

By Rongi Yost
Correspondent

Clear, cold weather created ideal race conditions on Mt. Bachelor's Cliffhanger run on Saturday, February 10, for the OSAA giant slalom race. Warmer temperatures earlier in the week added moisture to the snow, and colder temperatures on Saturday froze the moisture, which created a nice hard crust for the race course.

Coach Gabe Chladek said, "The perfect conditions led to a fast surface and little rutting."

This was the first giant slalom the Outlaws raced in two weeks, and the team did a good job of adjusting to the faster racing style.

Holland Hartman and Skylar Wilkins, the two Outlaws girls, skied well, and are showing improvement with every race. Hartman finished 34th in the combined, and Wilkins was right behind her at 35th.

The boys are getting faster with every race as

well. George Chladek skied his best giant slalom race to date, scored 35 points for the team, and earned 13th place in the combined score. Ethan Morgan finished 19th in the boys combined, which Coach Chladek noted was a very impressive athletic performance for a first-year racer. Ethan scored 16 points for the Outlaws.

Evan Palmer also had two very good runs. Evan slid out on his hip early in his first run and still pulled off 21st place in the combined, and scored 16 points for the team.

The Sisters boys combined finish order is as follows: George Chladek 13th, Ethan Morgan 19th, Evan Palmer 21st, John Banks 48th, Christopher Lundgren 52nd, Conner Petke 53rd, Spencer Kemp 67th, Corbin Johnson 69th, and Ian Cash 71st.

The Outlaws have the next two weekends off from races, and will focus on training for the league finals, which will be held Friday and Saturday, March 2 and 3 at Mt. Bachelor.

Frontiers In Science

MONTHLY SYMPOSIUM IN SISTERS

Undamming the Elwha: A River Revived

Jerry Freilich, Ph.D.



Dr. Jerry Freilich was chief of research for Olympic National Park during the largest dam removals in U. S. history, a project that is now returning the Elwha River to its much wilder former life — often in unexpected ways.

Dr. Freilich has devoted his life to research and science education throughout a long career with the National Park Service. The planning for the Elwha River dam removals took decades; the actual work, completed in 2014, had taken several years, and the restoration of the river will flow far into the future.

Dr. Freilich will share the ongoing story of the Elwha — its turbulent history and emerging future, the effects of the dams on the ecosystem and the Lower Elwha Kallam Tribe, impacts on the local economy, and changes in the river's delta on the Strait of Juan de Fuca.

Tuesday, February 27
At The Belfry, 302 E. Main Ave., Sisters
One-hour lecture begins at 7 p.m.

Doors open at 6 p.m. for community hour!

Admission: \$5;
Science Club Donors,
Teachers and Students - FREE
Save the Date: Tues., March. 27
Dr. Larry Price: "Gravitational Waves:
The Discovery of the Century"



Bring your curiosity and an appetite for food, drink & knowledge!