Over 150 students celebrated Winter Commencement on Dec. 17 at the Rushmore Plaza Civic Center.
The Amazon River is teeming with life, from solitary 400-pound catfish to shoals of 8-pound piranha. But in the Amazon basin around Santarem, Brazil—where white water, clear water, and black water rivers pool together—it’s the ancient tiny mollusks that have captured the attention of Laurie Anderson, Ph.D.

The waters create a rich breeding ground for extreme aquatic life in one of the world’s largest rivers.

Anderson’s research interest is in a genus of typically saltwater Corbulidae clam from the last member of a once diverse radiation in the Amazon. She has devoted much of her career to studying this clam and other family members in the fossil record, and she continues to explore its evolutionary track.

Anderson, head of the Department of Geology & Geological Engineering, spent three weeks in the fall on a boat in the Amazon Basin, collecting specimens for a National Science Foundation-funded survey on aquatic faunal of the lower Amazon. It was her second trip for this comprehensive survey of freshwater macrofauna (larger invertebrate and fish) by a team of thirteen senior researchers from five countries. Anderson is co-principal investigator.

The species inventories of sponges, flatworms, annelids, mollusks, crustaceans, and fishes will result in large collections at premier natural history museums. The research will also produce species description and taxonomic revisions; online and printed guides to the aquatic macrofauna; a guide to fishes of the lower Amazon; a detailed plan for the long-term monitoring of aquatic diversity in floodplain and forest stream systems; and a Tropical Biodiversity Field Course for US and Brazilian students.

The Amazon’s current course is a relatively recent phenomenon, geologically speaking, Anderson says. Tens of millions of years ago the river drained to the north into the Caribbean.

While the Amazon is a white water river, the Brazilian basin where the team conducts research is a lake where the clear water Tapajos River and the black water Arapiuns Rivers join. “The Amazon Basin is known for having a number of taxa that we typically think of as marine-inhabiting freshwater. This includes my clams but also dolphins, sting rays, needle fish, etc.,” Anderson says.

Eleven million years ago the western Amazon Basin was a large series of wetlands that saw the diversification of several lineages of mollusks, including the Corbulidae, she says. “I am now using the new collections from Brazil to get molecular data to place members participating in this radiation in the evolutionary tree for the family. This marine family has freshwater representatives also in Australia and Asia, and my colleagues and I are trying to determine if these taxa represent a single branch of the evolutionary tree, or if members of the family invaded freshwater multiple times in their evolutionary history,” Anderson says.

To see more photos from Anderson’s trip, visit here.

Click to read more stories on our research blog.
SD Mines Mobilizes Area Residents to Serve on MLK Jr. Holiday

Several student groups from the South Dakota School of Mines & Technology will step up to serve as volunteers on the annual Martin Luther King, Jr. holiday. Volunteers will collect food and cash donations at local grocery stores, joining hundreds of thousands of Americans across the country in volunteer service.

The seventh annual food drive will be from 4-6:30 p.m. Monday, Jan. 16. Volunteers will be at the following locations: All Rapid City Family Thrift locations, Prairie Market, Fresh Start Neighborhood Market, both Rapid City Safeway locations, Save -A-Lot and both Walmart locations.

Checks can be made out to Feeding South Dakota. Cash donations will help purchase food for the SD Mines student food pantry.

The annual event honors Dr. King’s legacy and is an opportunity for Rapid City residents to renew their own personal vows of citizenship through service to others. Last year, 100 students collected 2,244 pounds of food and raised over $650.

Student Organizations participating are SD Mines Rotaract Club, Circle K International, NSBE, Delta Sigma Phi, Triangle, Student Association Senate, Lambda Chi Alpha, Society of Physics Students, Hardrocker Dance Team, Future Health Science Professionals Club, Biomedical Engineering Society and LEAP.

The Professional Development Institute will help weigh food, and CAMP will help load food onto the Feeding South Dakota truck.
Congratulations Graduates
The South Dakota School of Mines & Technology, Friends of the Devereaux Library and the Elks Theatre will host the 23rd annual Nostalgia Night Film Series, “To Serve ... and Entertain” Jan. 8 to March 12.

Each film shown at the historic Elks Theatre downtown features popular stars of the silver screen who also served in the military. Proceeds of the annual event will support the Devereaux Library at SD Mines.

This year's series includes 10 classic films, each shown at 7 p.m. on Sunday evenings.

• Jan. 8: “Captain Newman, M.D.”
  o Gregory Peck leads an all-star cast of Tony Curtis, Bobby Darin, Eddie Albert, Robert Duvall and Angie Dickinson in this acclaimed 1963 classic WWII comedy/drama.

  o Paul Newman gives an outstanding performance as Luke, a loner sentenced to a chain gang. George Kennedy won an Academy Award for his role in this 1967 classic.

• Jan. 22: “Desk Set”
  o Katharine Hepburn and Spencer Tracy engage in a battle of wits in the highly entertaining 1957 comedy.

• Jan. 29: “Desperate Journey”
  o Errol Flynn and Ronald Reagan take on Nazis in this 1942 drama when their bomber is downed in WWII Germany and they must get to England with top secret information.

• Feb. 5: “Change of Habit”
  o Elvis Presley and Mary Tyler Moore team up in this popular 1969 musical drama, Elvis’ final film.

• Feb. 12: “My Darling Clementine”
  o Henry Fonda stars as Wyatt Earp, Victor Mature as Doc Holliday and Walter Brennan as patriarch of the Clanton clan in this 1946 western.

• Feb. 19: “The Man from Snowy River”
  o Kirk Douglas stars in this old-fashioned 1982 Western saga.

• Feb. 26: “Alice Doesn’t Live Here Anymore”
  o Ellen Burstyn gives an Oscar-winning performance in this 1974 film. Kris Kristofferson and Diane Ladd also star.

• March 5: “Play Misty for Me”
  o Clint Eastwood, stars and directs this 1971 thriller. Rated R.

• March 12: “Roman Holiday”
  o Runaway princess Audrey Hepburn lands in the arms of reporter Gregory Peck in this 1953 film, which was nominated for 10 Academy Awards.

Season tickets are $40 and available at the Devereaux Library on the SD Mines campus; Elks Theatre, 512 6th St.; and Bag Ladies, 524 6th St. Tickets are also available by mail at Devereaux Library, 501 E. Saint Joseph St., Rapid City, S.D., 57701-3995.

Tickets for individual films may be purchased at the door on the evening of the film.
South Dakota School of Mines & Technology junior Libby Friesen was named to the Rocky Mountain Athletic Conference (RMAC) Cross Country All-Academic First Team. Friesen, from Olathe, Kan., has a 4.0 GPA and is majoring in civil and environmental engineering.

The SD Mines women’s cross country team also placed four athletes on the RMAC All-Academic Cross Country Honor Roll.

Rachel Lovelace, a sophomore from Rochester, Minn., with a 3.75 GPA; Erica Westerman, a sophomore from Yankton, with a 3.77 GPA; Kari Radke a junior from Elk River, Minn., with a 3.54 GPA; and senior Therese Frels, a senior from Guthrie Center, Iowa with a 3.81 GPA were all named to the RMAC Honor Roll.

On the men’s side, Ashton Grissom, a sophomore from Parker, Colo., with a 3.59 GPA, and Davis Mathieu, a senior from Spokane, Wash., with a 3.59 GPA, qualified for the Cross Country Men’s RMAC Honor Roll list.

“"We’re very excited to see seven of our scholar-athletes recognized for all the time and effort they put into their academics," said Hardrocker Cross Country Head Coach Steve Johnson. "They work very hard to balance their academic and athletic endeavors and we’re very proud of what they’ve accomplished. It’s a privilege to work with them on a daily basis."

To qualify as an RMAC All-Academic athlete, the athlete must carry a 3.3 cumulative GPA; have been a student at the active member institution for at least two consecutive semesters and have had a season of competition. First Team All-Academic members were voted on by the conference’s sports information directors.
SD Mines recently hosted over 70 elementary and middle school students who sent their LEGO robots into competition.

Ten teams of budding engineers ages 9-14, from regional schools and as far away as Pierre, competed in the regional FIRST LEGO League qualifying contest, vying for the opportunity to advance to the state finals.

Since August, teams had been working together and learning to build and program competitive autonomous robots, which had to complete various tasks on their own within a given time to earn points.

This is the sixth year SD Mines has hosted the competition. The theme this year was “Animal Allies,” how to effectively collaborate with animals to help one another.

Intern Spotlight

Samuel Wendte  |  Army Corps of Engineers

Senior mechanical engineering major Samuel Wendte from Yankton interned with the US Army Corps of Engineers working on a levee project in San Acacia, New Mexico.
HEALTH CAREER EXPO

Wednesday March 1
2-5 p.m.
in the Surbeck Center ballroom

We had a wonderful year filled with SD Mines memories. Watch our Year in Review video.
Mines in the News

South Dakota School of Mines & Technology Graduates Walk Across Stage

Kulas’ Hard Work in the Offseason Helps Him Shine for Hardrockers

$6.5 Million Granted To Vision Fund Recipients

Student-Athlete Konor Kulas Nominated for The 2017 Allstate NABC Good Works Team

Students Band Together to Compete in NASA Contest

Three Area Schools Increase Classroom Innovation Through State Grant Program

SD Mines Senior Vaughn Vargas Ready to Add Diploma to List of Accolades

Bestselling Author Advises Graduates to Carve out a Place in the World

Parade of Trees Feeds Hungry Students

About Legacy News

Legacy News is produced by the Office of University Relations the first Wednesday of each month. The newsletter is a compilation of news releases, photos and Web articles.

To submit news or story ideas or to subscribe to the email distribution list, please contact Dani Mason, public relations officer, at 605.394.2554 or at Danielle.Mason@sdsmt.edu.

For more Mines news, visit news.sdsmt.edu