From: <u>Leah D Nixon</u>

To: Shelly L Armstrong; Archive
Subject: Local Students Build Race Car
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Included below, please find a press release regarding Ferris State University's Formula SAE team, which will be competing in the Formula SAE Competition at the Ford Proving Grounds in Romeo May 16 through 20. The team will be available for interviews on Tuesday, May 15. Further information is available by contacting Leah Nixon, assistant director of News Services.

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## Ferris students build race car set to compete May 16 through 20

BIG RAPIDS – They feel the need, the need for speed. And, the Formula SAE Competition is just what the doctor ordered for Ferris State University's Formula SAE team, which is preparing to make its second appearance at the annual event held at the Ford Proving Grounds in Romeo, Mich., May 16 through 20.

Another year wiser, with a tad more experience under their belts, this year's Formula team hopes to capitalize on lessons learned during the team's debut at the 2006 event. The most important lesson: Less is more, or so the team found out.

"The best cars come in under 400 pounds and we expect ours to be around 450 pounds," said Paul Riggs of Battle Creek, who serves as the team's engineering manager and also frame engineer. The team's 2006 model weighed in at more than 600 pounds.

Going back to the drawing board, the Formula team analyzed the loads that go into the car's frame. From there, they used better geometry and chose better materials such as aluminum vs. steel to construct components of the race car.

"The overall dimensions are tighter, so it should corner faster," Riggs said. "We also looked at our suspension and steering geometry to see how we could change steering angles and tire movement. The lighter the unsprung mass, the better the tire will conform to the road."

While team Co-advisor and professor of Mechanical Engineering Technology Chuck Drake admits he'd rather stay on the slow track, the academic potential of the students' work on this race car is enormous, he said, noting this was an entirely student-driven endeavor.

"The students took an engineering approach to making decisions...they challenged each other and analyzed what would be the best way to do something," Drake said. "They did a super job with the suspension, which is very complicated geometry.

"This is my world...how you would design things in the engineering world. The students took an intellectual approach to engineering with research and calculations," he added, saying they took ownership of the project.

During the competition, performance criteria include maneuvering, braking, acceleration and endurance. The car also will be judged on the project's engineering, design presentation, safety features, manufacturing plans and costs.

The team's core members include Project Manager Erik Olsen of Traverse City, Riggs, Assistant Engineering Manager Josh Garrett of Royal Oak, Secretary and Engine Manager Brad Costa of Scituate, R.I., Suspension Manager Kevin Gregory of Rodney, and Budget Manager Jillian Espvik of Manistee, along with Tony Bolek of Shelby Twp., Shane Brewer of Battle Creek, A.J. Gugliotta of Bellaire, Ind., and Waigan Liu of Battle Creek. Additional student help includes Kamran Abolhasani of Belding, David Bush of Newaygo, Brent Coffell of Saginaw, Brian Flint of Oak Park, Ill., Pat Hughes of Buffalo Grove, Ill., Lon Schell of Melvin, Michael Schultz of Charlotte, Kevin Trahey of Inkster, Kyle Walkowski of Clarkston, and Shane Wierda of Coopersville.

Professor of Manufacturing Engineering Technology Bruce Gregory serves as co-advisor of the team with Drake. The Society of Automotive Engineers chapter advisors include associate professor of Automotive Service Technology Dan Skurski and assistant professor of Automotive Service Technology Gary Gage.

Major sponsors include Ferris' College of Technology, the Mechanical Engineering Technology program, the Reid Family Foundation, West Michigan Section SAE, Hanchett Manufacturing, Gregory, Genzink Steel, J.O. Galloup Co., and Mr. and Mrs. Douglas Riggs. In-kind support has been provided by the Automotive, Manufacturing, Welding, Heavy Equipment and Electronics departments at Ferris, as well as the Student Chapter of SAE.

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