

This year, four educators from Portland Public Schools will be one of 14 teams that will venture to NASA Johnson Space Center's Ellington Field in Houston to conduct their experiments aboard the agency's "Weightless Wonder" aircraft this summer.

This opportunity to participate is the result of the hard work and commitment of Carla Oesterle (Vestal), Jennifer Kelly (Jackson Middle School), **Principal LaShawn Lee (Faubion) and Melanie Ramsey (Faubion)**. "PPS High Flyers" were selected from more than 40 world-wide proposals based on scientific merit and educational outreach potential. They have put extensive hours into researching and building their experiment. Their ultimate goal is to reach out to other educators, students and the Portland community to share their unique experiences and discoveries.

Each year, the Reduced Gravity Education Flight Program (RGEFP) gives K-12 educators the opportunity to propose, build and fly a reduced gravity experiment. The PPS High Flyers will perform the experiments aboard a microgravity aircraft, which produces weightlessness 18 to 25 seconds at a time by executing a series of about 30 parabolas – a steep climb followed by a free fall – over the Gulf of Mexico. During the free falls, the teachers will be able to gather data in the unique environment and experience near-weightlessness.

The team will arrive at Ellington Field, where astronauts do their T-38 training, on July 22, 2011. They will go through physiological training and fly our experiment during the week of July 22nd to July 30th. This experiment will test Cartesian Divers during our reduced gravity flights, one of the experiments at this year's science fair. A Cartesian diver is a simple device with a variable density that floats and sinks with applied pressure. In real life, scuba divers wear weights to keep their density close to the density of water; otherwise they would float to the surface. The experiment tests how divers are affected by pressure and volume of the surrounding fluid in different gravities. Following our flight, the team will evaluate findings, draw conclusions and provide the results to NASA.