## **Balancing Ball 2006** Notes for the Future

A. The Balancing Ball snack was an over all simple setup with a complex idea and explanation. However, the demonstration activity was very hands-on and exciting, and therefore, Balancing Ball was one of the more popular exhibits at Exploritorio 2006. Its supplies consisted of:

\*2 hair dryers:

-one borrowed from Mr. Baird and one brought from home, both set on the coolest temperatures so as to not melt the ping pong balls.

\*Leaf blower:

-Borrowed from Mr. Baird

\*One standard beach ball:

-Purchased from Wal-Mart with area to decorate with markers, 18" diameter \*6 ping pong balls:

-Taken from home, we brought extra just in case some were lost, decorated with markers \*Table clamp with mounting rod, standard rod clamp, and mountable ring:

-borrowed from Mr. Baird, we used the table clamp, rod, and standard rod clamp to suspend a hair dryer in a permanent position, and the mountable ring as the whoop in Bernoulli Basketball, a game we created

B. The first issue to be confronted is to make sure that you set up your station near an outlet so you can plug in the hair dryers. We had a suspended hair dryer from home that we kept running with a ping pong ball balancing on the air stream when people were first entering the room in order to attract them to our booth. Mr. Baird's hair dryer we kept free so we could move it around in our demonstration and allow the participants to interact with the snack. We also created a game called Bernoulli Basketball. In this game the participant had to balance a ping pong ball in the air stream of Mr. Baird's hair dryer and try to maneuver the floating ball through the mountable ring that we had connected on the rod. This was extremely popular with the little kids, as they all wanted to try it. Bernoulli Basketball also helped in our demonstration by giving the participant the ability to test the limits and behaviors of the air stream. We also had a person stationed outside the physics room balancing the beach ball in the air stream of the leaf blower.

C. Although there were not many problems, a couple did arise with the leaf blower demonstration as Exploritorio progressed. The first beach ball that we purchased had a hole in it, so it did not retain the amount of air needed for the demonstration. Also, the weather did not cooperated with this portion of our snack. The wind was blowing pretty vigorously, so the beach ball was easily blown out of the air stream. Along with the wind, the temperature was very low, causing an uncomfortably cold environment for the demonstrator and it started to rain, so the leaf blower portion had to be ended early. It didn't attract many people anyway, so there wasn't much of a loss when this happened.

D. Overall, the Balancing Ball snack was very exciting for the children, and informative for the adults. Its vast popularity kept the station busy all day long, and remained interesting to all who came and viewed it.