





### A Brief Introduction...

The University of Rochester Neuroscience Graduate Program, inspired by the success of its inaugural event last year, embarked on an ambitious expansion of its involvement in the 2014 Brain Awareness Campaign. Students and faculty from across the University's neuroscience community took part in two months of outreach events at local elementary schools. This year, children in Kindergarten through 5<sup>th</sup> grade were engaged in activities that taught them about how the brain controls the processing and perception of our senses of touch, balance, smell, hearing and vision.

The expansion more than doubled our efforts, visiting eight different local elementary schools and reaching over 1500 students. Fifty dedicated volunteers committed 90 hours of in-class time to carry out the activities and lessons designed by a core planning committee. Our traveling caravan of scientists set up shop in each classroom, executing a huge logistical feat and demonstrating remarkable flexibility.

We received glowing feedback from students, teachers, and administrators alike. This year's Brain Awareness Campaign proved to be another incredibly rewarding experience for our volunteers!

### Brain Awareness Campaign by the Numbers

Volunteers	In-class Hours	Schools	Children
 x50	 x90	 x8	 x1500

### Presenting... the Brain!

We started each session by introducing students to Freddy, our model brain. We talked about why our brains are important and all the things they help us do every day. Once we finished the activity stations, we reviewed what we learned about our senses and the brain. Students had an opportunity to ask questions and also provided some great ideas as to how we can keep our brains safe. To inspire continued conversations about the brain at home, we handed out pencils with fun brain erasers, buttons, stickers and activity workbooks!



### Seeing Things...

Our "vision" station showed us what happens when our eyes and brains play tricks on each other. (*Top Left*) We found our blind spots, witnessed holes in our hands and were awed by some optical illusions. (*Bottom Left*) We also experimented with prism goggles and learned how bending light can distort our perception. Tossing bean bags into our buckets was pretty tough when our eyes were sending skewed information to our brains!



### All About Ears!

Our "hearing" and "balance" stations taught us about those funny things on the sides of our heads and how sound travels through our ears and into our brains. We learned that we get dizzy because the fluid in our semi-circular canal keeps moving, even when we stop spinning. That makes it pretty tough to walk in a straight line!



### Testing Our Sniffers

Our "smell" station allowed us to explore how our brain stores memories of our favorite foods. Chocolate and peppermint were some of our favorites! We also learned that our noses help give our brain more information than just our eyes in a vinegar vs. water smell test.



### Can You Feel It?

Our "touch" station was comprised of several activities tailored to different grade levels. (*Below*) We learned that our fingers contain a large number of receptors that provide detailed information and can even allow us to read! (*Top Left*) We investigated how our receptors can desensitize, and how that changes the way we perceive temperature. (*Left*) We also discovered that discriminating between objects of similar shape is much easier when our receptors have access to tactile information. Gloves make it much harder to find the matching pairs in the mystery box!



### Critical Acclaim!

Overall our 2014 Brain Awareness Campaign was a huge success! Not only did our volunteers have a great experience, the students had a blast learning about the brain!

