



Newsletter Winter 2018

WINTER ACTIVITIES

Here are a few crafty activities for you and your child to try this winter.



PAPER HEART PENGUIN: Have your child use child-safe scissors to cut: 1) an oval out of black construction paper for the body; 2) a large, skinny white heart out of white construction paper for the belly; and 3) three small orange hearts from orange construction paper (one for the beak and two for the feet). Then, glue the white heart onto the penguin's body with the point facing down. Afterwards, glue one small orange heart on as the penguin's nose, for the beak, and the other two on as the penguin's feet. Finally, add googly craft eyes to complete your new friend!

What you will need: Orange, black, and white construction paper; craft eyes; scissors; a glue stick



WINTER TREE FINGER PAINTING: On a light blue sheet of construction paper, use black paint or a black marker to create a winter tree by hand or using your child's handprint! Leave to dry. Once the tree is complete and dried, have your child add snow using white finger paint. Sponges, cotton balls, Q-tips, and a variety of other materials can also be used to add snowflakes. Let dry and display your scenic winter landscape!

What you will need: Blue construction paper; nontoxic white paint/finger paint; black marker/black paints & brush; Q-tips/sponge brushes/cotton balls/etc. (optional)



MAKE YOUR OWN SNOW: Mix 3 cups of baking soda with ½ cup of white hair conditioner until somewhat crumbly and moldable in texture. Let play begin! Optionally, use tools to sculpt, carve, or mold!

What you will need: Baking soda; white hair conditioner; large bowl; beads, craft eyes, ribbon, cookie cutters, playdough tools, etc. (optional)

GET TO KNOW: VANESSA ANNULYSSE



Vanessa Annulyse is a member of our WIND Study team. She requests all the WIND Study payments for participation in follow-up interviews and in-person visits. Vanessa is from the Boston area, and graduated from the College of the Holy Cross in 2015 where she studied Sociology and Peace and Conflict Studies. In fall of 2018, she will go to Boston College for her Master's degree in Higher Education. She hopes to become a career counselor and get involved in diversity education.

Vanessa has friends with asthma, and their health problems remind her regularly about the importance of the WIND Study. She enjoys working on the study and contributing toward the goal of finding a way to better treat young children with severe respiratory problems and preventing asthma.

Vanessa would like to thank all of the parents who continue to support the WIND Study as we try to better understand bronchiolitis, as well as all of the coordinators who are working their hardest to maintain high follow-up rates and collect the information and specimens to achieve our goal!

WIND STUDY QUOTE

“We didn't really know what to expect when we joined the WIND Study, but my daughter loves being a part of the study. She loves to get little surprise gifts in the mail, and she tells all her friends at school she's in the WIND Study. She feels very special to be a part of it! I'm so happy that we're involved.”

– WIND Study Parent

CONTACT US!

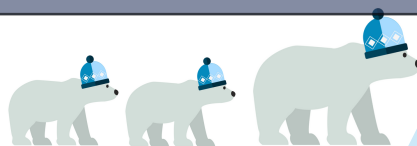
Do you have questions about the WIND Study? Did you recently move, or change your phone number or e-mail? Please let us know so we can stay in touch. Call or e-mail us anytime.

855-815-WIND (9463)

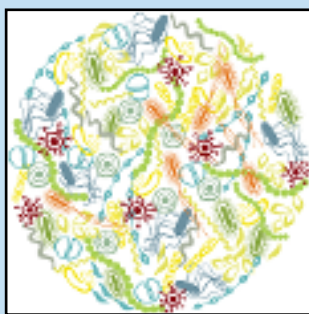
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IN-DEPTH: WHAT IS THE MICROBIOME?



A *microbe* is a general term used by scientists to describe microscopic organisms. Microbes such as viruses and bacteria are so small that they cannot be seen with the naked eye. We often hear about viruses and bacteria in infections, but not all microbes cause disease. In fact, the average human body contains trillions of microbes that can have both positive and negative effects on our health. These microbes live on our skin as well as in places such as the nose, mouth, lungs, and intestines of healthy children. The result is that the human body contains ten times more microbes than human cells! Just like our human cells, these microbes have genes and can create molecules that circulate throughout the body and affect our health. Indeed, the number of genes in these microbes is 200 times more than the number of genes in human cells.

The term *microbiome* refers to all the microbes living in the human body and their genes. A person's microbiome can be influenced by many factors, including genetics, diet, and environmental factors. Scientists are finding connections between the make-up of a person's microbiome and many different childhood diseases, such as asthma, eczema, obesity, and diabetes. We do not fully understand why or what can be done to create a healthier microbiome. WIND study researchers are examining the microbiome to learn more about these microbes and their impact on childhood health. Your participation and the information you and your child provide over the phone – and through the swabs taken at the in-person visits – allow WIND Study researchers to investigate the microbiome and its association with bronchiolitis and asthma in a way no other study has done before.

To read more about the microbiome, check out [this interactive site from the University of Utah](#). If you have any questions about the WIND Study, feel free to reach out any time via email at windstudy@partners.org or our toll-free number 1-855-815-WIND (9463).



RESEARCH UPDATE: WIND STUDY IN THE NEWS

The WIND Study investigates the association between children hospitalized with bronchiolitis and the possible development of breathing problems. The goal of the WIND study is to be able to identify children at higher — and lower — risk for future wheezing and asthma. Ongoing research efforts examine the information provided during follow-up phone interviews and the samples collected at the in-person visit to investigate what factors might explain why some children develop breathing problems and other don't. For this reason, it's important for us to follow up with all the WIND Study participants, including our healthy participants! WIND Study results were published in two research journals this fall.

Genetic information is stored in the DNA of human cells and determines aspects about us that make us unique, like our hair color and eye color. Likewise, the **microbiome** contains genetic information and contributes to our uniqueness. WIND Study researchers examined the genetic material of the microbiome of the nose to learn the ways in which differences in the nasal microbiome may affect respiratory infections and immune system reactions. This research found significant differences in the ways the microbiome and the immune system react to two common viral infections. These differences will help us better understand *how* different viruses affect the body in order to better treat these infections and related respiratory problems. This research was published in the article entitled “RSV versus rhinovirus bronchiolitis: Difference in nasal airway microRNA profiles and NFκB signaling,” and accepted for publication in the journal *Pediatric Research* in November 2017. Follow this [link for the full text](#) of the article.

Information about the microbiome of the nose may be discovered by collecting mucus in the nose. This mucus can be collected in two different ways: using a nasal swab to collect material from the front of the nose and using a thin, flexible tube to suction mucus from parts of the nose that are further back. The WIND Study compared the microbes from these two areas. This research found that while the microbes in these two areas are somewhat different, there is considerable overlap – enough overlap that it's probably okay to focus on using swabs from the front of the nose, which are much easier to obtain. This will make future research a little easier – for both the researchers and the children! This research was published in the article entitled “The association between anterior nares and nasopharyngeal microbiota in infants hospitalized for bronchiolitis,” and accepted for publication in the journal *Microbiome* in December 2017. Follow this [link for the full text](#) of the article.

Thank you for your time, participation, and assistance in this research. We couldn't do it without you!