### CONTACT US ABOUT PARTICIPATING TODAY!

This important study will help us to develop the safest exercise recommendations possible for children with SCA so that like other children, they may experience all of the good things that regular physical activity and exercise can have on their health.

#### CHICAGO, IL

Ann and Robert H. Lurie Children's Hospital

University of Illinois at Chicago

New York, NY

Columbia University Medical Center

Memphis, TN

St. Jude Children's Research Hospital



Ann & Robert H. Lurie Children's Hospital of Chicago

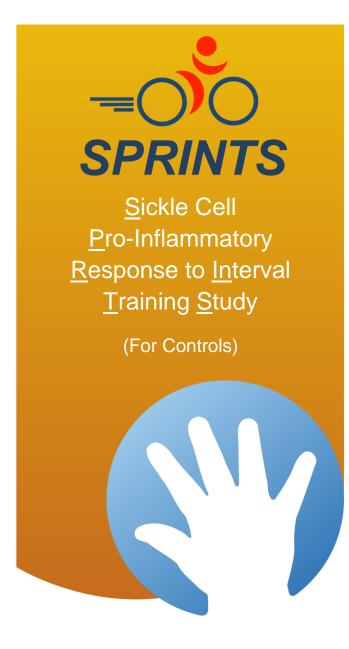
**Comprehensive Sickle Cell Program** 

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luriechildrens.org



This study is sponsored by:





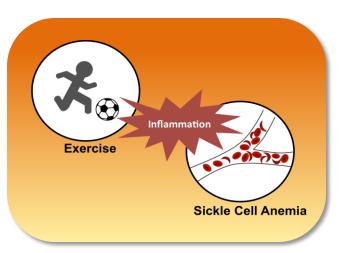
#### Why participate?

We are asking you to be in this research study because we want to learn more about sickle cell anemia (SCA) and exercise. You can help us do this even though you do not have SCA.

Children should exercise every day whether or not they are healthy or have a health problem like SCA. But we do not know what levels of physical activity and exercise are safe for children with SCA. This makes it hard for doctors to tell children with SCA and their parents how much and how hard children with SCA can exercise or play sports.

Exercise can increase inflammation, which can be harmful in SCA. In this study, we hope to learn if inflammation caused by different levels of exercise is similar in children with SCA and without SCA. We also want to see if exercise-related inflammation can cause changes in the lungs that look like asthma.

Help doctors learn about exercise and inflammation in sickle cell anemia



### Do you qualify?

Your participation is voluntary. We are looking for children and young adults without SCA or sickle cell trait who meet these criteria:

- Between 10 and 21 years old
- African-American or of African or Afro-Caribbean descent.
- No history of asthma, exercise-related asthma or heart problems

Contact the sickle cell doctors at your hospital to see if you qualify for this study

# What kind of exercise testing will be done?

Two types of exercise tests will be done as part of this study.

The first test measures overall fitness level. Participants will be asked ride an exercise cycle in place while important information about your breathing is collected. This test usually lasts between 5 and 10 minutes.

The second exercise test looks at how exercise, at either lower or higher intensity, increases inflammation in the body. Participants will ride the exercise cycle for 2 minutes at a time for a total of 8 times with rest periods in between exercise.



## What does this study involve?

This study includes 3 study visits (screening, visits 1 and 2) involving tests to help doctors learn about how the body responds to exercise in children with and without SCA.

The purpose of the screening visit is to make sure it is safe for participants to be in the study. This visit will include surveys, blood and urine tests, a bone health x-ray, and breathing tests. Visit 1 will include the first cycle exercise test. Visit 2 will include the second cycle exercise test at either lower or higher intensity, and blood tests. Breathing tests will be done before and after each exercise test.

You will be compensated for your participation in this study