



**(NOTE: DO NOT SIGN THIS DOCUMENT UNLESS AN IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN APPLIED TO THIS DOCUMENT.)**

**PARENTAL PERMISSION & MINOR ASSENT for a Research Study entitled  
"The Effect of Throw Intensity on Overhead Throwing Mechanics"**

**Explanation and Purpose of the Research**

Your child is being asked to participate in a research study for the Sports Medicine & Movement Lab in the School of Kinesiology. Before agreeing to participate in this study, it is vital that you (and your child) understand certain aspects of what might occur. This statement describes the purpose, methodology, benefits, risks, discomforts, and precautions of this research. This statement describes your child's right to confidentially and your child's right to discontinue your child's participation at any time during the course of this research without penalty or prejudice. No assurances or guarantees can be made concerning the results of this study.

This study is designed to examine the effects of throw intensity on overhead throwing mechanics in participants between the ages of 14 – 25. Participants must be without surgery or injury for the past 6 months not currently be experiencing any ailment which would prevent them from throwing with 100% effort, and have played or be currently playing competitive baseball at the high school level.

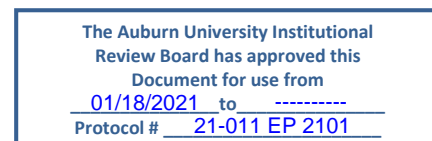
**Research Procedures**

Testing for this research will require your child to be dressed in compression shorts and tennis shoes. Your child's height, body mass, and age will be documented. Height and mass will be measured with a stadiometer and weight scale and will be recorded to the nearest tenth of a kilogram and centimeter. Age will be determined from this consent form and will be recorded to the nearest month.

Once these measurements have been collected, your child will be allowed to perform any kind of non-throwing warm up they would typically do before throwing. After this non-throwing warm up, your child will have motion capture markers placed on your legs, arms, torso, and neck with tape and allowed to complete their typical throwing warm up. Your child's throwing mechanics as they complete their throwing warm up will be recorded.

Parent (Legal Guardian) Initials: \_\_\_\_\_

Participants Initials: \_\_\_\_\_



After your child has completed their throwing warmed up, they will complete ten throws at 50% effort. Five of these throws will be performed with a crow-hop and five will be performed with a single step from standstill. They will then repeat this combination of five crow-hop and five single-step throws at 75% and 100% effort. Following the 100% effort throws, they will be offered an optional break of up to 10 minutes to minimize the risk of fatigue. During the break we will calculate their average max throw speed from the five 100% effort single-step throws. They will then complete five crow-hop and five single-step throws at 50% and 75% of their average max throw speed. They will be allowed a  $\pm 2.5\%$  margin of error for these throws (i.e., if the average max speed was 80 miles per hour, the target for the 50% condition will be 38 – 42 miles per hour). This will take approximately two hours.

### **Potential Risks**

As with any movement research, certain risks and discomforts may arise. The possible risks and discomforts associated with this study are no greater than those involved in competitive baseball and may include muscle strain, muscle soreness, ligament, labral, and tendon damage to the throwing arm. Every effort will be made to minimize these risks and discomforts by selecting participants who are currently playing the position of pitcher competitively. It is your child's responsibility, as a participant, to inform the investigators if your child notices any indications of injury or fatigue or feel symptoms of any other possible complications that might occur during testing.

Due to the need for your child's physical presence at the research site, face to face interaction with the researcher or others, etc., there is a risk that your child may be exposed to COVID-19 and the possibility that your child may contract the virus. For most people, COVID-19 causes only mild or moderate symptoms. For some, especially older adults and people with existing health problems, it can cause more severe illness. Current information suggests that about 1-3% of people who are infected with COVID-19 might die as a result. Your child will need to review the Information on COVID-19 for Research Participants that is attached to this consent document. To minimize your child's risk of exposure any investigator who needs to come closer than 6 feet in contact with the participant will wear the appropriate personal protective equipment (PPE) of a face mask, eye protection, gloves (discarded after each participant), and lab coat (discarded after each participant). Additionally, all research equipment that will come in contact with the participant will be decontaminated BEFORE and AFTER each participant with EPA approved disinfectant. Participants will be required to wear a cloth mask while researchers are within 6 feet. These procedures will be enforced while the Human Research Protection Program requires additional safety measures due to COVID-19.

To reduce the risk of injury, certain precautions will be taken. Ample warm-up and cool-down periods will be required of your child, and water will be provided to your child as needed.

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Participants Initials: \_\_\_\_\_

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## **Confidentiality**

All information gathered in completing this study will remain confidential. Your child's individual performance will not be made available for public use and will not be disclosed to any person(s) outside of the research team. The results of this study may be published as scientific research. your child's name or identity shall not be revealed should such publication occur. The researcher will try to prevent any problem that could happen because of this research. If at any time there is a problem your child should let the researcher know and he or she will help Your child. Should an emergency arise, we will call 911 and follow our Emergency Action Plan. You are responsible for any cost associated with medical assistance.

## **Participation and Benefits**

Participation in this research is strictly voluntary and refusal to participate will result in no penalty. Your child will be allowed to withdraw consent and discontinue their participation in this research at any time; without bias or prejudice from Auburn University Department of Kinesiology or the Sports Medicine and Movement group. In the unlikely event that you sustain an injury from participation in this study, the investigators have no current plans to provide funds for any medical expenses or other costs you may incur.

By participating in this study, your child will receive information regarding appropriate age-related pitch counts that may help prevent injury. This will allow you the opportunity to alter their training programs in an effort to minimize injury resulting from fatigue. By receiving this information, you may be able to better determine the proper length of the pitching performance.

## **Questions Regarding the Study**

If you have questions about this study, please ask them now. If you have questions later, you may contact Kyle Wasserberger at 616 502 4969 or email at kww0009@auburn.edu

If you have any questions about your child's rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334)-844-5966 or email at irbadmin@auburn.edu or IRBChair@auburn.edu

**HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.**

\_\_\_\_\_  
Ansel Balmer

Printed Name of Participant

\_\_\_\_ yr. \_\_\_\_ mo.  
Age of Participant

\_\_\_\_\_  
Printed Name of Parent of Participant

\_\_\_\_\_  
2021-05-22

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Parent

The above consent form was read, discussed, and signed in my presence. In my opinion, the person signing said consent form did so freely and with full knowledge of its contents.

\_\_\_\_\_  
Signature of Investigator

\_\_\_\_\_  
Date

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## Information on COVID-19 For Research Participants

Auburn University recognizes the essential role of research participants in the advancement of science and innovation for our university, community, state, nation, and beyond. Therefore, protection of those who volunteer to participate in Auburn University research is of utmost importance to our institution.

As you are likely aware, COVID-19 references the Coronavirus that is being spread around the world including in our country, state, and community. It is important that we provide you with basic information about COVID-19 and the risks associated with the virus so that you can determine if you wish to participate or continue your participation in human research.

**How is COVID-19 spread?** COVID-19 is a respiratory virus that is spread by respiratory droplets, mainly from person-to-person. This can happen between people who are in close contact with one another. It is also possible that a person can get COVID-19 by touching a surface or object (such as a doorknob or counter surface) that has the virus on it, then touching their mouth, nose, or eyes.

**Can COVID-19 be prevented?** Although there is no guarantee that infection from COVID-19 can be prevented and no vaccine is currently available, there are ways to minimize the risk of exposure to the virus. Examples include but are not limited to, “social distancing” where individuals physically distance themselves from others (a minimum of 6 feet is often used as a standard distance); using effective barriers between persons; wearing personal protective equipment like masks, gloves, etc.; washing hands with soap and water or sanitizing hands after touching objects; disinfecting objects touched by multiple individuals, etc.

**What are the risks of COVID-19?** For most people, COVID-19 causes only mild or moderate symptoms, such as fever and cough. For some, especially older adults and people with existing health problems, it can cause more severe illness. While everyone is still learning about this virus, current information suggests that about 1-3% of people who are infected with COVID-19 might die as a result.

**Who is most at risk?** Individuals over age 65 and those with chronic conditions such as cancer, diabetes, heart or lung or liver disease, severe obesity, and conditions that cause a person to be immunocompromised have the highest rates of severe disease and serious complications from infection.

**What precautions should be taken?** Based on the proposed research, precautions for the risk of COVID-19 will be addressed on a project by project basis. You will be provided with information about precautions for the project in which you may participate. Any site where research activities will occur that are not a part of Auburn University (offsite location) are expected to have standard procedures for addressing the risk of COVID-19. It is important for participants to follow any precautions or procedures outlined by Auburn University and, when applicable, offsite locations. Further, participants will need to determine how best to address the risk of COVID-19 when traveling to and from research locations. The US Center for Disease Control and Prevention has issued recommendations on types of prevention measures you can use to reduce your risk of exposure and the spread of COVID-19.

Auburn University is continuing to monitor the latest information on COVID-19 to protect our students, employees, visitors, and community. Our research study teams will update participants as appropriate. If you have specific questions or concerns about COVID-19 or your participation in research, please talk with your study team. The name and contact information for the study team leader, along with contact information for the Auburn University Institutional Review Board for Protection of Human Research Participants, can be found in the consent document provided to you by the study team.

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