



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

Auburn University  
**CONSENT TO PARTICIPATE IN RESEARCH**  
Title: The Effect of Throw Intensity of Overhead Throwing Mechanics

Explanation and Purpose of the Research

You are 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 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 right to confidentially and your right to discontinue your 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 years old. 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 you to be dressed in compression shorts and tennis shoes. Your height, body mass, and age will be documented. Height and mass will be measured with a stadiometer and weight scale 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, you will be allowed to perform any kind of non-throwing warm up you would typically do before throwing. After this non-throwing warm up, you will have motion capture markers placed on your legs, arms, torso, and neck with tape and allowed to complete your typical throwing warm up. Your throwing mechanics as you complete your throwing warm up will be recorded.

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

Participant Initials: \_\_\_\_\_

### 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 responsibility, as a participant, to inform the investigators if you notice 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 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 you, and water will be provided to you as needed.

### Confidentiality

All information gathered in completing this study will remain confidential. Your 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 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 you should let the researcher know and he or she will help you. 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. If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the School of Kinesiology.

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

Participant Initials \_\_\_\_\_



### **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 by phone 616 502 4969, or email at kww0009@auburn.edu.

**If you have any questions about your 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

\_\_\_\_\_  
Date of Birth

2021-05-22

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

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

The Auburn University Institutional  
Review Board has approved this  
Document for use from  
01/18/2021 to -----  
Protocol # 21-011 EP 2101

## 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.