

**GREATER SAN DIEGO SCIENCE & ENGINEERING FAIR (GSDSEF)
PROJECT PROPOSAL/SIGNATURE* FORM (GSDSEF-1, 2015)**

This form must be completed and signed prior to starting project work. It must be placed in the student's notebook with an ABSTRACT OF THE PROJECT for the GSDSEF Screening Fair. (Use the "Tab" key to move from line to line)

1. Project Title The Hand Span Journey: A Comparison of Peripheral Vision Ability in Those of Different /
Is this a continuation of a previous project? Yes No

2. STUDENT'S NAME (Last, First, Middle) Ju, Saeyeon

2a. Partner's Name (for Senior Division 2 person projects only) _____

EACH SENIOR DIVISION PARTNER MUST SUBMIT A SEPARATE PROJECT PROPOSAL FORM.

3. Address, City, Zip 12317 Caminito Peral San Diego California 92131

4. Phone (858)610-8420 email danieljuwk@gmail.com

5. School Thurgood Marshall Middle School Grade 8

6. Teacher Mrs. Elaine Gillum

7. This project involves (check all that apply):

- Live Vertebrate Animals (GSDSEF-2, 2015)
- Humans as subjects, helpers, or interviewees (GSDSEF-3, 2015)
- Hazardous Substances (anything that could cause injury) (GSDSEF-4, 2015)
 - Chemicals
 - Infectious Agents
 - Bacteria, Fungi and/or Molds
 - Mutagenic Agents
 - Carcinogenic Agents
 - Teratogenic Agents
- Human or Other Vertebrate Tissue (GSDSEF-5, 2015)

8. WHERE REQUIRED (see #7 above), the following supplemental forms must be completed and included with the project proposal form (CHECK ALL THAT APPLY):

- Certification of Humane Treatment of Live Vertebrate Animals (GSDSEF-2, 2015)
- Certification of Compliance of Research Involving Humans (GSDSEF-3, 2015)
- Certification of Hazards Control (GSDSEF-4, 2015)
- Certification of Vertebrate Tissue Source & Safety (GSDSEF-5, 2015)

9. Location where experimental procedures will take place: School, church, public places, in

the daytime

10. People, companies, etc. providing equipment, materials, workspace: None

11. Describe, in 200 – 250 words, the planned project/experiment and the procedures to be used:

This experiment is a comparison of the peripheral vision abilities between different ages. There are four groups in this project, the child group, teenager group, adult group, and elder group. The child group has subjects with ages ranging from 11-13 years, the teenagers 14-19 years, the adults 20-59 years, and the elders 60-80 years. These subjects are tested with a device called the vision protractor. This device was made and is in the shape of a semicircle with a diameter of two feet. It has a small cutout semicircle with a one-inch diameter on the middle of the edge of the protractor for the subject's nose. There are degrees on the protractor that start at zero degrees at the edge of the protractor, then go up to the middle to 90 degrees. Three colors, red, blue, and green, are put onto long wooden sticks. The colors go across the curve of the protractor and when the subject first sees the protractor out of the corner of their eye, the color will stop moving. The degree of which the subject first noticed the color will be recorded. Both the left and right side of the indirect vision is tested, and there are three trials per color. The data of the different groups will be compared, and the results will show which group had the best ability, and which group had the worst. The results will also show which colors were easiest to see and which were hardest to see.

Just before the screening fair, attach a 200-250 word ABSTRACT of your project to this form.

*Continue to next page for required Signatures

**GREATER SAN DIEGO SCIENCE & ENGINEERING FAIR
(GSDSEF) PROJECT PROPOSAL/SIGNATURE FORM (GSDSEF-1, 2015)
REQUIRED SIGNATURES:**

Student:

I have read the *Rules and Regulations* of the GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR and certify that my project complies with them. I understand that failure to meet the terms of these rules and regulations will result in the disqualification of my project.

SENIOR DIVISION: GSDSEF forms meet the requirements of California law; therefore, all Senior Division students agree that, should they be selected to compete at the 2015 Intel International Science and Engineering Fair (Intel ISEF), when they sign all required Intel ISEF forms they will predate them to agree with the date on this form.

Student Signature/Date

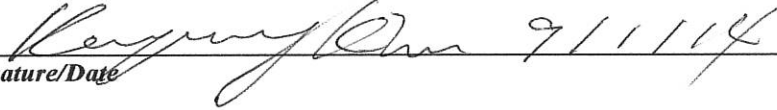


9/1/14

Parent/Guardian:

I am aware of all potential safety hazards connected with this project, approve the precautions being taken to ensure my student's safety and will, when appropriate, provide guidance and/or supervision. I understand that failure to comply with *Rules and Regulations* of the GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR will result in the disqualification of the project.

Parent Signature/Date



9/1/14

Teacher:

I approved this project prior to the student beginning work on it and verified that it complies with the *Rules And Regulations* of the GREATER SAN DIEGO SCIENCE AND ENGINEERING FAIR. Any concerns about the project's design, appropriateness, safety, or legality were submitted to the GSDSEF Scientific Review Committee (SRC) for approval prior to allowing the student to proceed. I understand that failure to comply with the Fair's *Rules And Regulations* will result in the disqualification of the project. I will provide all needed supervision (other than that specified on other included forms) and will ensure that this proposal and all required supplemental forms are included in the student's notebook at the screening fair. I will have the student, if invited to apply for entrance to the GSDSEF, submit all SRC requested certification forms with their 2015 Application for Entrance.

Teacher Signature/Date



9-1-14

Additional Advisor (if required)

When certification forms (GSDSEF 2, 3, 4 or 5, 2015) are signed by someone in addition to the science teacher, a signature here ensures that the procedures described on these forms will be followed.

Additional Advisor Signature/Date