Approval Form (1B)

A completed form is required for each student, including all team members.

1.	To Be	Comp	leted by	Student	and	Parent
----	-------	------	----------	----------------	-----	---------------

- a. Student Acknowledgment:
 - I understand the risks and possible dangers to me of the proposed research plan.
 - I have read the Intel ISEF Rules and Guidelines and will adhere to all International Rules when conducting this research.

I have read and will abide by the following Ethics statement Student researchers are expected to maintain the highest standards of honesty and integrity. Scientific fraud and misconduct are not condoned at any level of research or competition. Such practices include but are not limited to plaglarism, forgery, use or presentation of other researcher's work as one's own, and fabrication of data. Fraudulent projects will fail to qualify for competition in affiliated fairs and the Intel ISEF. 06/22/19 Victoria Levv Student's Printed Name Date Acknowledged (mm/dd/yy) (Must be prior to experimentation.) b. Parent/Guardian Approval: I have read and understand the risks and possible dangers involved in the Research Plan/Project Summary. I consent to my child participating in this research. Urszula Rakowska 06/22/19 Parent/Guardian's Printed Name Date Acknowledged (mm/dd/yy) Signature (Must be prior to experimentation.) 2. To be completed by the local or affiliated Fair SRC (Required for projects requiring prior SRC/IRB APPROVAL. Sign 2a or 2b as appropriate.)

Required for projects that need prior SRC/IRB approval BEFORE experimentation (humans, vertebrates or potentially hazardous biological agents).	b. Required for research conducted at all Regulated Research Institutions with no prior fair SRC/IRB approval. OR This project was conducted at a regulated research institution	
The SRC/IRB has carefully studied this project's Research Plan/ Project Summary and all the required forms are included. My signature indicates approval of the Research Plan/Project Summary before the student begins experimentation.	(not home or high school, etc.), was reviewed and approved by the proper institutional board before experimentation and complies with the Intel ISEF Rules. Attach (1C) and any required institutional approvals (e.g. IACUC, IRB).	
	Dr. Grace Rossi Ph.D.	
SRC/IRB Chair's Printed Name	SRC Chair's Printed Name . Lise Rosse 9/12/19	
Signature Date of Approval (mm/dd/yy) (Must be prior to experimentation.)	Signature Date of Approval (mm/dd/yy)	
a Till a Light Affiliated Fair CDC Approval	(Deguined for ALL Ductocts)	

3. Final Intel ISEF Affiliated Fair SRC Approval (Required for ALL Projects)

SRC Approval After Experimentation and Before Competition at Regional/State/National Fair I certify that this project adheres to the approved Research Plan/Project Summary and complies with all Intel ISEF Rules.						
Regional SRC Chair's Printed Name	Signature	Date of Approval (mm/dd/yy)				
State/National SRC Chair's Printed Name (where applicable)	Signature	Date of Approval (mm/dd/yy)				

Approval Form (1B)

A completed form is required for each student, including all team members.

1. To Be Completed by Student and Parent

- a. Student Acknowledgment:
 - I understand the risks and possible dangers to me of the proposed research plan.
 - I have read the Intel ISEF Rules and Guidelines and will adhere to all International Rules when conducting this research.
 - I have read and will abide by the following Ethics statement

Student researchers are expected to maintain the highest standards of honesty and integrity. Scientific fraud and

vimala Alagappan Student's Deight of Name	Vimale	and the Intel ISEF.	06/22/19
b. Parent/Guardian Approval: I have Research Plan/Project Summary			
Vairam Alagappan	1/_	M	06/22/19
Parent/Guardian's Printed Name	Signature		Date Acknowledged (mm/dd/yy) (Must be prior to experimentation.)
To be completed by the local (Required for projects requiring prio Required for projects that need prior SRC/I	r SRC/IRB APPRC	VAL. Sign 2a or 2b a	research conducted at all Regulated Research
BEFORE experimentation (humans, vertebra hazardous biological agents).	ites or potentially	OR	ith no prior fair SRC/IRB approval. Inducted at a regulated research institution
The SRC/IRB has carefully studied this project's R Project Summary and all the required forms are signature indicates approval of the Research Plan Summary before the student begins experimenta	included. My n/Project	(not home or high by the proper instit complies with the I	school, etc.), was reviewed and approved autional board before experimentation and ntel ISEF Rules. Attach (1C) and any required wals (e.g. IACUC, IRB).
		Dr. Grace R	ossi Ph.D.
SRC/IRB Chair's Printed Name		SRC Chair's Printed	Name . 9/12/19
Signature Date of Approx (Must be prior to ex	/al (mm/dd/yy) perimentation.)	Signature	Date of Approval (mm/dd/yy)
3. Final Intel ISEF Affiliated Fair S	RC Approval	(Required for A	LL Projects)
SRC Approval After Experimentation and Befor I certify that this project adheres to the approved	e Competition at Red d Research Plan/Pro	gional/State/National ject Summary and com	Fair oplies with all Intel ISEF Rules.

(where applicable)

State/National SRC Chair's Printed Name

Signature

Date of Approval (mm/dd/yy)