# **Checklist for Adult Sponsor / Safety Assessment Form (1)**

This completed form is required for ALL projects and must be completed prior to experimentation

Student's Name				
1) The student and a parent / guardian h	nave signed the Approval For	rm (1B).		
2) I have reviewed the <b>Research Plan</b>	I have reviewed the Research Plan (1A), Research Plan Attachment and signed Approval Form (1B).			
3) This project involves the following ar	rea(s) and requires SRC/IRB a	pproval before experimentation begins:		
Human Subjects	Contro	olled Substances		
Vertebrate Animals	=	abinant DNA		
Pathogenic Agents*				
e e	ted from the environment should	be considered potentially pathogenic.		
4) This project does not involve any of t	the research areas listed in #3.			
This project involves human subjects  Board (IRB) before experimentation	* *	oval from an <b>Institutional Review</b>		
This project involves vertebrate anim DNA. The student will obtain approximately experimentation is started. (See pp.	oval from a Scientific Review	lled substances or recombinant  Committee (SRC)/IACUC before		
	vision to the student. Prior app	devices checked below. A Designated proval by the adult sponsor and certification by		
	•	ermined that this project is a tissue study and for a purpose other than the student's project.		
reviewed with the student the Materialso reviewed the proper safety stan	ial Safety Data Sheet (MSDS) List dards for each chemical including	arcinogens; mutagens and all pesticides). I have sting for each chemical that will be used. I have g toxicity data, proper handling techniques, and isit the American Chemical Society's website at		
	recautions for the equipment to b	have reviewed with the student the proper se used by the student. For information about by.		
Firearms. I have reviewed with t	the student the proper safety stand	dards for firearms use.		
Radioactive Substances. I has student will use.	ave reviewed the proper safety sta	andards for each radioactive substance the		
Radiation (i.e., x-ray or nuclear; u student the proper safety methods c	_	0-400 nm wavelength). I have reviewed with the ne student will use.		
Adult Sponsor's Printed Name	Signature	Date of Review (Must be prior to experimentation.)		

## Research Plan (1A)

This completed form is required for ALL projects.

Type or print all information requested.

Answer all questions and complete Research Plan Attachment (see page 28)

1) Student's Name	Grade	
2) Title of Project		
3) Adult Sponsor	Phone: Email:	
4) Is this a continuation from a previous year? Yes If Yes: a) Attach the previous year's abstract, Research b) Explain how this project is new and different for the second seco	h Plan 1A and Research Plan Attachment and	
5) This year's laboratory experiment/data collection will beg	gin: (must be stated (mm/dd/yy)	
Projected Start Date:	Projected End Date:	
ACTUAL Start Date:	ACTUAL End Date:	
6) Where will you conduct your lab work? (check all that apply)	Research Institution School Field Hor	
7) Name, address & phone of school and work site(s):  School:  Work site:  8) All projects require completed forms: Checklist for Research Plan (1A), Research Plan Attachment and Research Institutional/Industrial Setting Form (1C)	d Approval Form (1B) and may require Regulated	
Check ALL items that apply to your research.  The following areas require review and approval by	y SRC or IRB prior to experimentation :	
Humans (requires prior IRB approval; complete Forms: Ch		
	al, complete: Checklist, 1A, 1B, 5A or 5B [1C, 2, 3, if required])	
Pathogens (requires prior SRC approval; complete Forms: 0	• • • • • • • • • • • • • • • • • • • •	
	plete Forms: Checklist, 1A, 1B, 2 or 3 [1C, 2, 3 as required])	
Recombinant DNA (requires prior SRC approval, complete	FOITHS. CHECKHSI, 1A, 1B [2, 3, 1C, as required])	
The following areas require approval by a Designat	ted Supervisor prior to experimentation:	
Human/Animal Tissue (complete Forms: Checklist, 1A, 11	B, 3,6[1C, if required])	
Hazardous Substances or Devices (complete Forms: Check	klist, 1A, 1B, 3 [1C, if required])	

- 9) Complete Research Plan Attachment (See page 28) and attach to this form.
- 10) An abstract is required for all projects after experimentation (see page 24).

## **Research Plan Attachment**

**REQUIRED for ALL Projects** 

A complete research plan must accompany Research Plan Form (1A) Additional pages may be attached

<b>Student Name(s):</b>		
* *	search plan and attach to Research Plan Form (1A)	

Provide a typed research plan and attach to Research Plan Form (IA).

The research plan is to include the following:

- A. Question being addressed
- B. Hypothesis/Problem/Engineering Goals
- C. Description in detail of method or procedures (including chemical concentrations and drug dosages)

For human research, include survey or questionnaires if used, and critically evaluate the risk. See instructions for human research on p. 12 of the Rules. For vertebrate animal research, you must briefly discuss potential alternatives and present a detailed justification for use of vertebrate animals. See instructions on p. 15 of the International Rules.

### D. Bibliography

List at least five major references (e.g., science journal articles, books, internet sites) from your library research. If you plan to use vertebrate animals, give an additional animal care reference.

## Research Plan (1A) - TEAM

This completed form is required for ALL projects.

Type or print all information requested.

Answer all questions and complete Research Plan Attachment (see page 28)

1) a) Team Leader		Grade		
b) Team Member	c) Team Member	r		
2) Title of Project				
3) Adult Sponsor	Phone:	Email:		
·	revious year? Yes No as year's <b>abstract</b> , <b>Research Plan 1A</b> a project is new and different from previous			
5) <b>This year's</b> laboratory experin	nent/data collection will begin: (must b	pe stated (mm/dd/yy)		
Projected Start Date:	Projected	End Date:		
ACTUAL Start Date:	ACTUAL	End Date:		
6) Where will you conduct your l	lab work? (check all that apply) Research	ch Institution School Field Home		
7) Name, address & phone of sch	hool and work site(s):			
School:	Work site:	Work site:		
Research Plan (1A), Research Institutional/Inc	dustrial Setting Form (1C).	Form (1B) and may require Regulated		
		•		
	B approval; complete Forms: Checklist, 1A, 1B			
	RC approval; complete Forms: Checklist, 1A, 1	hecklist, 1A, 1B, 5A or 5B [1C, 2, 3, if required])		
	quires prior SRC approval; complete Forms: Cl			
	es prior SRC approval, complete Forms: Check			
The following areas requir	re approval by a Designated Supervis	sor prior to experimentation:		
	11 V 8 1			

- 9) Complete Research Plan Attachment (See page 28) and attach to this form.
- 10) An abstract is required for all projects after experimentation (see page 24).

# **Approval Form (1B)**

This completed form is required for ALL projects.

adhere to all International Rules when conducting th	iis research.		
Student's Printed Name	Signature		Date Acknowledged (Must be prior to experimentation.)
Parent/Guardian Approval: I have read and un and Attachment. I consent to my child participating i		ks and possible dangers invo	lved in the Research Plan (1A)
Parent/Guardian's Printed Name	Signature		Date of Approval (Must be prior to experimentation.)
c) Adult Sponsor Approval: I have read the Resear Checklist for Adult Sponsor with the student. I agree for compliance with all International ISEF Rules as the	ee to sponsor th	e student named above and as	
Adult Sponsor's Printed Name	Signature		Date of Approval (Must be prior to experimentation.)
2) Required for projects requiring S	SRC/IRB	APPROVAL. SIGN 2	
a) Required for projects that need prior SF IRB approval BEFORE experimentatio (i.e., see Item #8 on Form 1A.)		_	arch conducted at all ch Institutions with no B approval
The SRC/IRB has carefully studied this project's <b>Rese</b> : <b>Plan (1A) and Attachment</b> and all the required forms ar included. My signature indicates approval of the <b>Rese</b> : <b>Plan (1A)</b> before the student begins experimentation.	re	This project was conducted institution ( <b>not home or hig</b> and approved by the proper	at a regulated research sh school, etc.), was reviewed r institutional board before es with the ISEF Rules. Attach
SRC/IRB Chair's Printed Name	_	SRC/IRB Ch	nair's Printed Name
Signature Date of Appro		Signature	Date of Approval
NOTE: If a stam	np is used, it m	ust be initialed by the cha	irperson.
3) Final ISEF Affiliated Fair SRC A	APPROVAL.	(REQUIRED FOR AL)	L Projects)
SRC Approval After Experimentation and State I certify that this project adheres to the approved Research	•	_	
Regional SRC Chair's Printed Name	Signature		Date of Approval
State/National SRC Chair's Printed Name	Signature		Date of Approval

(where applicable)

## Regulated Research Institutional/Industrial Setting Form (1C)

This form must be completed by the scientist supervising the student research conducted in a regulated research institution (e.g., universities, medical centers, NIH, etc.) or industrial setting.

This form MUST be displayed with your project.			
Student's Name			
Title of Project			
To be completed by the Scientist (NOT the Student or Adult The student conducted research at my institution: (check one)	Sponsor) after experimentation:		
a) only to use the equipment b) to perform	m experiment(s)		
If b, the following questions must be answered.			
<ol> <li>How did the student get the idea for her/his project?</li> <li>(e.g. Was the project assigned, picked from a list, an original student idea, etc.)</li> </ol>			
2) Were you made aware of the ISEF rules before experimentation	? Yes No		
3) Did the student work on the project as a part of a research group If yes, how large was the group and what kind of research group was it (student student).			
4) What specific procedures did the student actually perform and he Please list and describe. (Do not list procedures student <b>only</b> observed.)	ow independently did the student work?		
Student research projects dealing with human subjects, value approval by an institutional regulatory board (IRB/IACU)	<u> </u>		
Scientist's Printed Name Signature	Title		
Institution	Date Signed		
Address	Email/ Phone		

## **Qualified Scientist Form (2)**

Required for research involving pathogens; may be required for research involving rDNA, vertebrate animals, controlled substances and humans. Must be signed prior to the start of student experimentation.

Stı	udent's Name				
Tit	Title of Project				
	be completed by the Qualified Scientist (qualifications must be in student's an ientist's Name	rea of research):			
	lvanced Degree Degree Specialty (must be staged degree does not clarify qualifications in student's area of research, please explain:	stated)			
Po	osition: Institution:				
A	ddress: Email/Phone:				
1)	<ul> <li>Will vertebrate animals be used?</li></ul>	yes yes yes yes yes	no no no no		
	Will human subjects be used?	yes yes	no no no		
	b) Please list the name(s) of the controlled substance(s):				
4)	Will recombinant DNA be used?	yes	no		
5)	Will pathogenic or potentially pathogenic agents be used?	yes	no		
	If yes, will accepted procedures be used?	yes	no		
6)	Will tissues or body fluids be used?	yes	no		
7)	Will hazardous substances be used?	yes	no		
8)	Will you directly supervise the student(s)?		no		
] 1 5	I certify that I have reviewed and approved the <b>Research Plan (1A)</b> and <b>Attachment</b> prior to the Designated Supervisor is not trained in the necessary procedures, I will ensure her/his training. I wresearch. I have a working knowledge of the techniques to be used by the student in the <b>Research</b> substance is used in this research, I certify that I possess a DEA license required for procuring and that a Designated Supervisor is required when the student is not conducting experimentation under Qualified Scientist's Printed Name  Signature	fill provide advice and Plan (1A) and Attac dispensing an addict	d supervision during the hment. If an addictive ive substance. I understand on.		
	Z		rior to experimentation.)		

# **Designated Supervisor Form (3)**

Required for projects using hazardous materials or devices, tissue studies or if a required Qualified Scientist is unable to supervise the experimentation.

Student's Name		
Title of Project		
To be completed by the Designated Sup		):
Name		
Position		
Institution		
Address		
Phone:		
List or describe your responsibilities in and devices used in this research, safety		
I certify that:  1) I have been trained in the techniques t 2) I will provide direct supervision.	o be used by this student prior to	the start of experimentation and that
Designated Supervisor's Printed Name	- Signature	Date of Signature (must be prior to experimentation.)

Human Subjects Form (4)
Required for all research involving humans. IRB approval required before experimentation.

1			*	<u> </u>
Student's Name				
Title of Project				
To be completed by Student Reset  1) Describe the purpose of this study a of the subject's involvement. Attach	nd list all of the research	procedures in which		
Describe and assess any potential rist that may be reasonably expected by			(physical, psycholo	ogical, social, legal or other)
3) Describe the procedures that will be	used to minimize risk, to	obtain informed cons	sent, and to maintain	confidentiality.
F (* 15 - 7	1. 1		,	
For questions or concerns regarding t	nis researcn, contact: Adı	ılt Sponsor	at Email/phone	
More than minimal risk where info IRB SIGNATURES (a minimum 1) Medical Professional: (circle) (a lice Member of IRB's Printed Name 2) Science Teacher:	of three signatures	is required)	sed social worker, physic	ian's assistant, or registered nurse) of Approval
Member of IRB's Printed Name 3) School Administrator:	Signature		Date of	of Approval
Member of IRB's Printed Name	Signature		Date of	of Approval
To be completed by Human Sub (prior to experimenta)  I have read and understand the conand I consent/assent to voluntarily research study.	tion) ditions and risks above	(Prior to exper	informed consent in and understand the cent to the participation	participant is under 18 and s required) e conditions and risks above n of my child.
I realize I am free to withdraw my confrom this study at any time without		in the rese	earch.	survey or questionnaire used
I consent to the use of visual image involving my participation in this re			to the use of visual in my child in this research	mages (photos, videos, etc.) arch.
Signature	Date	Signature		Date

Vertebrate Animal Form (5A)
Required for all research involving vertebrate animals that is conducted in a Non-Regulated Research Site. (SRC approval required before experimentation.)

Student's Name			
Title of Project			
To be completed by Stu	ıdent Researcher:		
1. Common name (or Ge	enus, species) and number of anima	als used.	
1 2	he housing and husbandry to be pro, type of food, frequency of food an	<b>C</b> 1	1 0
3. What will happen to the	ne animals after experimentation?		
To be completed by Scientific	c Review Committee (SRC) PRIOR to	o experimentation:	
Observational study of	only. Veterinarian and Designated Superv	risor NOT required.	
Behavioral or nutrition	onal study. Designated Supervisor REQU	JIRED. Please have applicable perso	on sign below.
Behavioral or nutritio	onal study. Veterinarian and Designated S	Supervisor REQUIRED. Please have	applicable persons sign below.
	onal study. Veterinarian, Designated Sup a Qualified Scientist Form (2).	pervisor and Qualified Scientist REQ	UIRED. Please have applicable persons
The SRC has carefully revie	ewed this study and finds it is an appro	opriate study and may be conduc-	ted in a non-regulated research site.
SRC Pre-Approval Signatur	re:		
SRC Chair Printed Name	Signature		Date of Approval
To be completed by Veterinar	ian:	To be completed by Designa	-
I certify that I have revie husbandry with the stude experimentation.	wed this research and animal ent prior to the start of		
I certify that I will provid care in case of illness or	de veterinary medical and nursing emergency.		that I will directly supervise the
Printed Name	Email/Phone	Printed Name	Email/Phone
Signature	Date of Approval	Signature	Date of Approval

Vertebrate Animal Form (5B)
Required for all research involving vertebrate animals that is conducted at a Regulated Research Institution. (IACUC approval required before experimentation.)

Stı	udent's Name			
Tit	tle of Project			
Ti	tle and Protocol Number of IACUC Ap	proved Project		
=				
	be completed by Qualified Scientist			
1.	Was this a student-generated idea or wa	as it a subset of your w	ork?	
2.	Were you made aware of the ISEF Rule	es before the student be	egan experimentation?	
3.	What laboratory training, including date	es, was provided to the s	student?	
4.	Species of animals used:		Number of an	nimals used:
5.	USDA Pain Category designated for thi	is study:		
6.	Describe, in detail, the role of the studer provided and safety precautions employ			olved with, oversight
		, , ,	• /	
7.	Attach a copy of the Regulated Resea	arch Institution IACU	C Approval. A letter from the C	Qualified Scientist or
	Principal Investigator is not sufficient.			
Ce	rtification or Documentation of Student Res	earcher Training		
Lis	t Certificate Number or Attach Documentation		Date(s) of Training	
06	5/PI Printed Name	Signature		Date
Ųβ	711 THROUNGING	Signature		Dait
ĪĀ	CUC Chair/Coordinator Printed Name	Signature		Date

## **Human and Vertebrate Animal Tissue Form (6)**

Required for all projects using fresh tissue, organs, primary cell cultures, established cell and tissue cultures, meat or meat by-products, human or animal parts, including blood, blood products, teeth and body fluids.

If the research involves living organisms, please ensure that the proper human or animal forms are completed.

Student's Name		
Title of Project		
<b>To be completed by Student Res</b> 1) What tissue(s), organ(s), or part(s		
2) Where will the above tissue, orga	an, or part be obtained (identify each separat	tely):
	urce within a research institution, please probbtained. Include the name of the research it of IACUC approval.	
To be completed by the Design	- stad Sunawigaw	
I verify that the student will we myself or qualified personne	work solely with organs, tissues, cultures or el from the laboratory; and that if vertebrate ter than the student's research.	
I certify that the blood, blood	I products, tissues or body fluids in this project forth in Occupational Safety and Health	
Printed Name	Signature	Date Signed (Must be prior to experimentation.)
Title		Phone

## **Continuation Projects Form (7)**

Required for projects that are a continuation in the same field of study from a previous year(s)' project.

This form is required for projects exhibiting at the Intel ISEF and should be accompanied by
the previous year's abstract and Research Plan (1A) with Attachment.

Please use a separate sheet of paper to list additional years as necessary.

Student's Name		
Title of Project		
To be completed by Student Research	her:	
1) How does the current year's project do	ocument new and different research	1?
2) Please briefly explain former years' wo	ork on this project, emphasizing hov	v it is different from the current year.
		rith Research Plan Attachment
2002-2003		
2001-2002		
Please use a separate sheet of paper to lis	st additional years as necessary.	
	e displayed at your project to help prov ur project and what research has been	
		,
display board properly reflect work do	•	year Abstract & Certification and project
Student's Printed Name	Signature	Date of Signature

Intel ISEF OFFICIAL ABSTRACT and CERTIFICATION	
	Category Pick one only mark an "X" in box at right
	Behavioral and Social Science  Biochemistry  Botany  Chemistry  Computers  Earth Sciences  Engineering  Environmental Sciences  Mathematics  Medicine and Health  Microbiology  Space Science  Physics  Zoology
	with (check ALL mbinant DNA an/animal tissue
2. Student independently performed all procedures as outlined in this abstract.   Yes	☐ No
3. This project was conducted at a Registered Research Institution.   Yes   No	
4. Is this project a continuation?  Yes No	
5. My display board includes photographs/visual depictions of humans (other than myself or my family): Yes No	
OFF	INTEL ISEF ICIAL USE
Finalist or Team Leader Signature Date	ONLY
This embossed seal attests that this project is in compliance with all federal and state laws and regulations and that all appropriate reviews and approvals have been obtained including the	

regulations and that all appropriate reviews and approvals have been obtained including the final clearance by the Intel ISEF Scientific Review Committee.

# ABSTRACT & CERTIFICATION INSTRUCTIONS

This abstract form and the instructions below are intended for Intel ISEF finalists. Entrants of regional and state fairs may also be directed to use this form. Please follow all local, regional or state instructions. As an Intel ISEF finalist, you will receive further information and will be required to complete this abstract in an on-line abstract system immediately after winning at your regional or state fair.

### WRITING REQUIREMENTS

Abstracts should be **single-spaced using 12-point type** from a black ribbon or laser cartridge. Abstracts may not exceed 250 words and must be typed within the predefined area (5.5" tall by 6" wide). Type title (Title Case required); your first name, middle initial and last name; and your school's name, city and state within the first .75 inches of space within the box. Two lines may be used for the title. *Teams must include all team member names*.

Example: Effects of Marine Engine Exhaust Water on Algae Mary E. Jones Hometown High School, Hometown, Pennsylvania

BE SURE TO ANSWER THE 4 QUESTIONS BY MARKING THE APPROPRIATE BOXES AND CERTIFY BY SIGNING

### TIPS ON WRITING

The three most common reasons that a student is asked to rewrite the abstract are 1) including acknowledgements (this includes naming the research institution and/or mentor with which you were working) 2) describing research not completed by the student finalist and 3) describing research done in previous years. Please limit yourself to describing research **you** have done in the current year.

### THE ABSTRACT ON YOUR DISPLAY BOARD

Because your Abstract & Certification will not be considered an official one until it is stamped/embossed at the Intel ISEF, you must NOT mount a copy of any abstract on your vertical display board before arriving at the Intel ISEF. If you plan to have an Abstract & Certification on your vertical display board (recommended), you should leave a space (8.5 by 11 inches) for it to be mounted after you have arrived at the ISEF and your Official Abstract & Certification has been returned with the embossed approval.

If you do not plan to mount a copy of your official Abstract & Certification on your vertical display board, you should bring with you a means by which to display the official Abstract & Certification in a vertical position somewhere at your project. The only abstract allowed anywhere at the Intel ISEF is the official Abstract & Certification. The term "abstract" may NOT be used as a title or reference for any information on your vertical display board or in readily visible materials at the project except as a part of displaying the Official Abstract & Certification.

### Information on Required Abstract & Certification for ALL Projects at the Intel ISEF

\* This form may not be relevant for your regional or state fair; please refer to instructions from your affiliated fair.\*

In ADDITION to the basic form requirements for ALL Projects and any other requirements due to specific areas of research, an Abstract & Certification is required at the conclusion of research. Details on this requirement follow.

### Completing the Abstract

After finishing research and experimentation, you are required to write a (maximum) 250 word, one-page abstract. This should be written on the Official Abstract and Certification Form as provided by Science Service. The abstract should include:

- a) purpose of the experiment
- b) procedures used,
- c) data, and
- d) conclusions.

It may also include any possible research applications. Only minimal reference to previous work may be included. An abstract **should not include**:

- a) acknowledgments (including naming the research institution and/ or mentor with which you were working), or
- b) work or procedures done by the mentor.

### **Completing the Certification**

At the bottom of the Abstract & Certification form there are four questions regarding the research that the student performed. Please read each carefully, answer appropriately, and sign in the signature box to certify your answers. The Intel ISEF Scientific Research Committee will review and approve the abstract and answers to the questions.

Revisions or questions will be resolved via an SRC appointment on site at the Intel ISEF. Please bring a copy of your Abstract & Certification to the fair. Only after final Intel ISEF SRC approval has been obtained via a stamped/embossed copy of this Abstract & Certification may a Finalist make copies to hand out to the judges and the public.

	Latel ICEE CAMDLE ADOTD ACT & CEDITIES ATL	ON	
	Intel ISEF SAMPLE ABSTRACT & CERTIFICATE  TITLE Finalist's Name School Name, City and State, Country	Category Pick one only mark an "X" in box at right	
	As a part of this research project, the student directly handled, manipulated, hat apply) human subjects	Behavioral and Social Science Biochemistry Botany Chemistry Computers Earth Sciences Engineering Environmental Sciences Mathematics Medicine and Health Microbiology Physics Space Science Zoology  or interacted with (check all	
	vertebrate animals controlled substances		
2. Student independently performed all procedures as outlined in this abstract. ☐ yes ☐ no  3. This project was conducted at a Regulated Research Institution. ☐ yes ☐ no  4. This project is a continuation. ☐ yes ☐ no  5. My display board includes photographs/visual depictions of humans (other than myself or my family): ☐ yes ☐ no			
re we Fin This regu	We hereby certify that the above statements are correct and the formation provided in the Abstract is the result of one year's search. I/We also attest that the above properly reflects my/our own ork.  The property reflects my/our own ork.  The property reflects my/our own ork.  Date  The property reflects my/our own ork.  The property reflects my/our own ork.  The property reflects my/our own ork.	FOR INTEL ISEF OFFICIAL USE ONLY	

Sample Intel ISEF Official Abstract & Certification

NOTE: Your abstract must be on the Intel International Science and Engineering Fair Abstract & Certification form and embossed/stamped by the Intel ISEF Scientific Review Committee before it is displayed or handed out. *No pasted or taped text will be permitted.* No other format or version of your approved Abstract & Certification will be allowed for any purpose at the Intel ISEF.