Appendix A: NISE Network Guidelines for Collecting and Handling Data

Purpose: This document is an attempt to protect the confidentiality of data even when members of a research team have not received human subjects protection training. Ideally, every person who interacts with participants, designs studies, collects data, or analyzes data would have training in how to protect human subjects and maintain confidentiality. Training for this can be found at http://phrp.nihtraining.com/users/login.php?l=3. This training is about 2 hours long.

However, we recognize that some projects do not have the budget to put every researcher through human subjects protection training, and thus, have made a brief list of guidelines for individuals who have not been through human subjects protection training. Individuals involved in research using human subjects should read through these guidelines with a researcher who has received human subjects training. Any questions that arise should be answered by the researcher who has received training. Before commencing research, the individual must sign the data confidentiality and human subjects protection form at the end of the guidelines to indicate their comprehension and consent to abide by these guidelines when conducting research on human subjects.

Guidelines for Collecting Data:

- If at all possible, do not collect identifying information. This includes:
 - o Names, addresses, phone numbers, email addresses
 - Video or still photos of participants' images
 - o Voice recordings of participants speaking
- When collecting data, you must be sure that your potential participants have agreed to informed consent. Informed consent is a statement describing the research procedures designed to protect your potential participants. See Appendix A for an example of informed consent. Informed consent should include:
 - o Participant rights:
 - The right to stop data collection at any time, with no fear of negative consequences.
 - The right to skip over any part of data collection that makes them uncomfortable.
 - The right to contact a third party (an authorized member of the NISE Network evaluation team) if they have any questions or concerns regarding data collection.
 - o Details of data collection:
 - The purpose and topic of data collection, i.e., what sorts of questions will you be asking, what topics will they be expected to cover, etc.
 - How long this should take
 - What their part will be, i.e., answering questions, enjoying the exhibits while being observed, discussing with others as part of a focus group, etc.
 - Any potential risks that participation might entail. These can include discomfort and embarrassment, not just physical harm.

- Any potential benefits they might gain from participating. These can include small gifts or prizes, or simply the knowledge that they are helping to improve things for others at your museum.
- Who will see their data, i.e., only authorized personnel who are evaluating exhibits, not the general public.
- What you will do to keep their data confidential or anonymous. Note that data is either confidential or anonymous, not both.
 - Confidential data does have identifiable information. Confidential means that you will take necessary measures to protect their information.
 - Anonymous data does not have identifiable information. There is no possible way that anyone can connect their data to their name, not even you.
- How you convey informed consent can vary by which method of collection you use.
 - Survey, interview, or focus group: if the data collected is anonymous, verbal consent to participate is considered sufficient. See Appendix B for an example of a script for verbal informed consent.
 - Minors: verbal consent from both the child and the parent or guardian is required to continue data collection.
 - Survey, interview, or focus group: if the data collected includes identifying information, a participant signature on a printed copy of the informed consent is required. See Appendix C for an example of written informed consent for an adult.
 - Minors: written consent from the parent or guardian is required to continue data collection. See Appendix D for an example of written informed consent for a minor.
 - O Naturalistic observation: informed consent can be conveyed via multiple signs at the point-of-use and entrance to the exhibit. See Appendix E for an example of informed consent signage. It is assumed that individuals who understand that they are being observed consent by choosing to enter the area under observation. Anyone who wishes to not be observed need only tell the observer.
 - Audio taping, videotaping, or still photography: Because it is possible that people could be identified through these methods, a participant signature on a printed copy of the informed consent is required. See Appendix C for an example of written informed consent for an adult.
 - Minors: written consent from the parent or guardian is required to continue data collection. See Appendix D for an example of written informed consent for a minor.
 - Online surveys: the first page of any survey should convey the informed consent. If participants click to the next page to begin the survey, informed consent is assumed. See Appendix F for an example of online informed consent.

Guidelines for Handling Data:

- If you collected any identifying information, you should now de-identify it if at all possible. To do this, complete the following steps:
 - Assign participants ID numbers

- O Use their ID number instead of their identifying information (name, address, phone number, etc) throughout the data.
- Have only one document that connects the ID numbers to identifiable information.
- o Keep this document secure (see below) and be sure to have it backed up.
- Keep all hard copies of data in a locked cabinet in a project office. Only authorized personnel should have access to this cabinet. When in use, data should be signed out to track who has used it.
- Keep all electronic copies of data on a secure server. Monitor who has access to these folders to be sure only authorized personnel can open files. Optional: password-protect all Excel or Word documents that contain data.
- If using online survey tools (such as www.SurveyMonkey.com), be sure they are password protected, and that only evaluation staff have access to the survey account.
- Do not share or discuss data with individuals who are not doing evaluation.
- When working on electronic data, computer should be set to lock out after 10 minutes of inactivity.
- For the purposes of the NISE Network's Team-Based Evaluation, after entering the data for analysis by the team, all originals and hard copies of the data should be sent to the NISE Network evaluation team mentor for storage. The NISE Network evaluation team will store the data securely for 10 years.
 - O Data used for analysis by the teams need to be securely stored on a locked computer or server that is password protected.
- After 10 years, data should be destroyed in the following secure ways:
 - o Paper data will be shredded and recycled.
 - o Audio and video tapes will be erased and re-used.
 - o Electronic data will be swept by your Information Services department.
 - Any data on an electronic survey tool (such as <u>www.surveymonkey.com</u>) will be destroyed by requesting destruction from the company.
 - o Data files on portable electronic devices containing data will be erased.

Data Confidentiality and Human Subject Protection Agreement

Please initial by each statement to certify its	
I have read the "Guidelines for Collec	-
	ed consent from anyone before gathering data.
I understand that informed consent mus	
	ny time without negative consequences
• The right to skip over any parts that	* *
 The right to contact a third party reg 	arding questions or concerns
• The purpose, topic, and method of d	ata collection
 What to expect during data collection 	n (time commitment, actions, etc).
 Potential risks of participating 	•
 Potential benefits of participating 	
	re access, and how we will protect confidentiality
	se the different types of informed consent (verbal,
written, signage).	se the uniterest types of informed compone (versus,
	pants include children, I must obtain informed
consent from both the child and the parent of	
I understand that ideally data should no	•
•	entifying information, it should be de-identified and
	bers to identifying information should be thoroughly
protected.	ibers to racinifying information should be thoroughly
1	d by passwords and lock and key when not in use.
	only by authorized personnel, even when it is de-
identified.	only by authorized personner, even when it is de
	ould I discuss the data in a way that would identify
the participant to others.	rata I discuss the data in a way that would rachtify
* *	must be sent to the NISE Network evaluation team
mentor and copies of data files must be kep	
	destroyed after ten years have passed, and how to
securely destroy different types of data.	destroyed after ten years have passed, and now to
	y these guidelines in all aspects of data collection,
	pest to assure that data is kept secure and confidential,
and to protect the rights of all human subject	
and to protect the rights of an namun subject	
Signature	Date

Appendix B: Example Scripts for Verbal Informed Consent

If you are cueing an adult to use exhibit(s) / program(s): Hi. We are designing a new [exhibit / program] about (topic), and we would like to know what you think about it. Would you be willing to try the [exhibit(s) / program(s)] out? After you try [it / them], I'll ask you a couple of quick questions about your experience. It should only take about [X] minutes. Your answers will be completely anonymous, you can quit at any time, and you can choose not to answer a question if you want. It shouldn't make you uncomfortable at all, and it would help us to design exhibits that will be more fun for you and everyone else in the future. Would that be okay?

- [If yes] Thank you!
- [If no] Have a great day!

If you are cueing a child under 18 to use exhibit(s) / program(s): Hi. We are designing a new [exhibit / program] about (topic), and we would like to know what you think about it. Would you be willing to try the [exhibit(s) / program(s)] out? After you try it/them, I'll ask you a couple of quick questions about your experience. It should only take about [X] minutes. Your answers will be completely anonymous, you can quit at any time, and you can choose not to answer a question if you want. It shouldn't make you uncomfortable at all, and it would help us to design exhibits that will be more fun for you and everyone else in the future.

- [To the parent / guardian]: Would it be okay for your child to participate?
- [To the child]: Would you like to participate?
 - o [If yes] Thank you!
 - o [If no] Have a great day!

If you are asking an adult to participate in an interview / survey after they have used the target exhibit(s) / program(s): Hi. We are trying to get feedback about the [exhibit(s) / program(s)] you just experienced, and we would like to know what you think about it. Would you be willing to answer a couple of quick questions about your experience? It should only take about [X] minutes. Your answers will be completely anonymous, you can quit at any time, and you can choose not to answer a question if you want. It shouldn't make you uncomfortable at all, and it would help us to design exhibits that will be more fun for you and everyone else in the future. Would that be okay?

- [If yes] Thank you!
- [If no] Have a great day!

If you are asking a child under 18 to participate in an interview / survey after they have used the target exhibit(s) / program(s): Hi. We are trying to get feedback about the [exhibit(s) / program(s)] you just experienced, and we would like to know what you think about it. Would you be willing to answer a couple of quick questions about your experience? It should only take about [X] minutes. Your answers will be completely anonymous, you can quit at any time, and you can choose not to answer a question if you want. It shouldn't make you uncomfortable at all, and it would help us to design exhibits that will be more fun for you and everyone else in the future.

- [To the parent / guardian]: Would it be okay for your child to participate?
- [To the child]: Would you like to participate?
 - o [If yes] Thank you!
 - o [If no] Have a great day!

Appendix C: Adult Written Informed Consent



Contact: Christine Reich (617) 589-0302 creich@mos.org

Adult Participant Release Form

The program you are about to participate in is being conducted as a part of the Nanoscale Informal Science Education Network (NISE Net). NISE Net is a network of informal science educators and science/technology researchers who are working together to inform the public about nanoscale science, engineering, and technology.

To help NISE Net members learn more about the effectiveness of their offerings, members of the NISE Net evaluation team will be collecting photographs, video recordings, and/or audio recordings of this event for research and publicity purposes. The collected videos, images and audios will be used as data for research and evaluation studies that investigate informal learning about nanotechnology, and may also be used for publicity purposes. The video, audio, and/or images may be published in any medium for any purpose whatsoever. Your name will never be associated with your image and/or comments unless you request that we do so. You will not receive monetary compensation for the use of your image and/or voice recordings.

If you do not wish to be photographed, videotaped or audio-taped, please indicate so on the attached form. Your participation in these activities is voluntary and you can still participate in the program without being photographed, videotaped, or audio-recorded.

You have the right to withdraw consent from this study at any time during or after the program. Your image, audio, and/or video will not be used for one week following your participation in this event so that you have time to reconsider your participation before your image/voice is made public. If you have any concerns or questions about this project, you may contact Christine Reich at the Museum of Science using the contact information above.

This form was approved as part of Protocol xxxx.xx under IRB Review and expires ##/#####.

1. Consent for Photography (check one)	
Yes, I agree to be photographed and to have pictures used for marketing, research, publication, or other purposes, as detailed in the letter above. I understand that I will not receive monetary compensation for the use of these images.	
☐ I do not agree to be photographed during this program.	
2. Consent for Videography (check one)	
Yes, I agree to be videotaped and to have video used for research, publications, or other purposes as detailed in the letter above. I understand that I will not receive monetary compensation for the use of these images.	
I do not agree to be videotaped during this program.	
3. Consent for Audio Recordings (check one)	
Yes, I agree to be audio-taped and to have the audio recording used for research, publications, or other purposes as detailed in the letter above. I understand that I will not receive monetary compensation for the use of this audio.	
I do not agree to be audio-taped during this program.	
Printed Name:	
Signature: Date:	
Email Address or Phone Number:	

Appendix D: Child Written Informed Consent



Contact: Christine Reich (617) 589-0302 creich@mos.org

Child Participant Release Form

The program your child is about to participate in is being conducted as a part of the Nanoscale Informal Science Education Network (NISE Net). NISE Net is a network of informal science educators and science/technology researchers who are working together to inform the public about nanoscale science, engineering, and technology.

To help NISE Net members learn more about the effectiveness of their offerings, members of the NISE Net team will be collecting surveys, interviews, photographs, video recordings, and/or audio recordings of this event. The collected surveys, interviews, videos, images and audios will be used as data for research and evaluation studies that investigate informal learning about nanotechnology, and may also be used for publicity purposes. The surveys, interviews, video, audio, and/or images may be published in any medium for any purpose whatsoever. Your child's name will never be associated with his or her image and/or comments unless you and your child request that we do so. You and your child will not receive monetary compensation for the use of your child's survey, image, and/or voice recordings.

If you do not want your child to be surveyed, interviewed, photographed, videotaped, or audiotaped, please indicate this on the attached form. Your child's participation in these activities is voluntary and he or she can still participate in the program without being surveyed, interviewed, photographed, videotaped, or audio-recorded.

You and your child have the right to withdraw consent from this study at any time during or after the program. Your child's survey, image, audio, and/or video will not be used for one week following his or her participation in this event so that you have time to reconsider your child's participation before his or her image/voice is made public. If you have any concerns or questions about this project, you may contact Christine Reich at the Museum of Science using the contact information above.

This form was approved as part of Protocol xxxx.xx under IRB Review and expires ##/#####.

1. Consent for Survey (check one)	
Yes, I agree to allow my child to be surveyed and to have his or her survey used for marketing, research, publication, or other purposes, as detailed in the letter above. I understand that neither I nor my child will receive monetary compensation for the use of this survey.	
I do not agree to allow my child to be surveyed during this program.	
2. Consent for Interview (check one)	
Yes, I agree to allow my child to be interviewed and to have his or her interview used for marketing, research, publication, or other purposes, as detailed in the letter above. I understand that neither I nor my child will receive monetary compensation for the use of this interview.	
I do not agree to allow my child to be interviewed during this program.	
3. Consent for Photography (check one)	
Yes, I agree to allow my child to be photographed and to have his or her pictures used for marketing, research, publication, or other purposes, as detailed in the letter above. I understand that neither I nor my child will receive monetary compensation for the use of these images.	
I do not agree to allow my child to be photographed during this program.	
4. Consent for Videography (check one)	
Yes, I agree to allow my child to be videotaped and to have video used for research, publications, or other purposes as detailed in the letter above. I understand that neither I nor my child will receive monetary compensation for the use of these images.	
I do not agree to allow my child to be videotaped during this program.	
5. Consent for Audio Recordings (check one)	
Yes, I agree to allow my child to be audio-taped and to have the audio recording used for research, publications, or other purposes as detailed in the letter above. I understand that neither I nor my child will receive monetary compensation for the use of this audio.	
I do not agree to allow my child to be audio-taped during this program.	
Your Child's Name: Your Name:	
Your Signature: Date:	
Email Address of Phone Number:	

Appendix E: Informed Consent Signage

To help us better serve our visitors, this area is being [observed / videotaped / audio taped] for research and evaluation purposes.

Observations will end at [X time].

With any questions or concerns, please contact [NISE Net evaluation team member name] at [phone number].

Appendix F: Example of Online Informed Consent

Dear [first name],

Thank you for visiting [name of museum]. When you visited the museum, you indicated that you might be willing to participate in a follow-up survey about your experience with [name of exhibit/program]. Below is a link to the survey:

[survey link]

This survey should only take about [X] minutes to complete, and it will help us to improve our exhibits and programs. The survey should not cause you any harm or discomfort. However, if you are at all uncomfortable with the questions, you can quit at any time, or skip any questions.

If you have any questions or concerns regarding this survey, please contact [name] at [email]. Thank you for your help!

--The Evaluation Team at [Museum Name]