

Supplemental Material

CBE—Life Sciences Education

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Bio-ITEST Educators Pre-Workshop Survey

Dear Educator:

Thank you for helping us better understand the effects of participating in NWABR professional development activities. We value your responses. These surveys are confidential. They will be sent to our external consultants who will report back aggregate data.

1) For each of the following, please select the number that best reflects how you would rate yourself, from “Very Low” to “Very High”:

	Very Low						Very High
	1	2	3	4	5	6	7
a) My comfort in finding biological information in publicly available databases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) My interest in analyzing biological information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) My comfort in using computer programs to visualize 3D images of molecules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) My understanding of how databases that store biological information can be used to help make medical decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) My interest in how science knowledge can guide ethical decision making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) My understanding of how the analysis of biological information can be used in different careers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) My awareness of reliable resources on the use of bioinformatics in different careers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2) In what ways do you currently integrate information about science careers in your classroom?

Please check all that apply:

- Student interviews with scientists
- Student research projects on science careers
- Student research on career paths
- Participation in BioExpo
- Field trip to worksite
- Guest speakers in classroom
- Other

If you selected “Other” please describe:

DEMOGRAPHICS

The demographic and professional questions below are for study summary purposes only. **No individual information will ever be shared or reported** with anyone other than Bio-ITEST project staff.

NAME: _____

3) SCHOOL:

Name of school _____

4) EDUCATION: As of **today**, what is your highest degree?

- Bachelor's
- Master's
- Doctorate

5) CERTIFICATIONS: As of **today**, what are your certifications? (Check all that apply)

- Biology certification
- Other science certification
- Career and technical educator certification
- Conditional certification(s)

If you selected "Conditional certification(s)" please describe:

6) EXPERIENCE: As of **today**, what is the **number of years** experience doing **each**:

	# of years
a) High school teaching:	_____
b) Biology teaching:	_____
c) All science teaching including biology:	_____

7) Have you had prior professional development in bioinformatics?

- Yes
- No

8) Have you had prior professional development in integrating ethics into science curricula?

- Yes
- No

9) **GENDER:** Female Male

10) **YOUR ETHNICITY:** Which ethnicity do you primarily consider yourself?

Hispanic/Latino

Non-Hispanic/Latino

11) **YOUR RACE:** Which race do you primarily consider yourself?

White

Black/African American

Asian/SE Asian

American Indian

Alaskan Native

Native Hawaiian

Pacific Islander

Other (write in) _____

Thank you for completing this survey!

If you have any questions about this study or further comments, you may contact Davis Patterson at 206.525.5274 or Dina Kovarik at 206.957.3337.

2) Now we would like you to consider how your level of skill, understanding, or awareness has changed as a result of the Bio-ITEST workshop. Please rate your level of skill, understanding, or awareness from “Low” to “High” BEFORE the Bio-ITEST workshop and then NOW.

	Very Low						Very High
	1	2	3	4	5	6	7
a) My understanding of the role of bioinformatics in biology careers before the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) My understanding of the role of bioinformatics in biology careers now	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) My awareness that conducting biological research increasingly relies on using large datasets before the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) My awareness that conducting biological research increasingly relies on using large datasets now	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) My ability to use bioinformatics resources to support my classroom instruction before the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) My ability to use bioinformatics resources to support my classroom instruction now	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) My skill in accessing information in biological databases before the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) My skill in accessing information in biological databases now	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) My skill level in using bioinformatics tools (e.g., sequence analysis and protein visualization tools) before the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) My skill level in using bioinformatics tools (e.g., sequence analysis and protein visualization tools) now	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please provide your name for study tracking purposes only. **No individual information will ever be shared or reported** with anyone other than Bio-ITEST project staff.

NAME: _____

3) Which Bio-ITEST strand(s) will you teach?

- Genetic Testing only
- Genetic Research (DNA Barcoding) only
- Both Genetic Testing and Genetic Research (DNA Barcoding)
- Don't know/not sure

4) What is the most significant "take-away" from this workshop for you?

5) Please share any other comments you have:

Thank you for completing this survey!

If you have any questions about this study or further comments, you may contact Davis Patterson at 206.525.5274 or Dina Kovarik at 206.957.3337.

Bio-ITEST Educators End-of-Year Survey

Dear Educator:

Thank you again for helping us better understand the effects of participating in NWABR professional development activities. We value your responses. These surveys are confidential. They will be sent to our external consultants who will report back aggregate data.

1. For each of the following, please select the number that best reflects how you would rate yourself, from “Very Low” to “Very High”:

	Very Low 1	2	3	4	5	6	Very High 7
1.1 My comfort in finding biological information in publicly available databases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2 My interest in analyzing biological information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3 My comfort in using computer programs to visualize 3D images of molecules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.4 My understanding of how databases that store biological information can be used to help make medical decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.5 My interest in how science knowledge can guide ethical decision making	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.6 My understanding of how the analysis of biological information can be used in different careers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.7 My awareness of reliable resources on the use of bioinformatics in different careers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CONTINUE ON REVERSE →

2. Now we would like you to consider how your level of skill, understanding, or awareness has changed as a result of participating in Bio-ITEST, thinking back to last summer before the Bio-ITEST workshop compared to now. Please rate yourself from “Very Low” to “Very High”

...BEFORE the Bio-ITEST workshop

...and then NOW.

	Very Low 1	2	3	4	5	6	Very High 7
2.1 My understanding of the role of bioinformatics in biology careers BEFORE the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2 My understanding of the role of bioinformatics in biology careers NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3 My awareness that conducting biological research increasingly relies on using large datasets BEFORE the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4 My awareness that conducting biological research increasingly relies on using large datasets NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5 My ability to use bioinformatics resources to support my classroom instruction BEFORE the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6 My ability to use bioinformatics resources to support my classroom instruction NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7 My skill in accessing information in biological databases BEFORE the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.8 My skill in accessing information in biological databases NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.9 My skill level in using bioinformatics tools (e.g., sequence analysis and protein visualization tools) BEFORE the Bio-ITEST workshop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.10 My skill level in using bioinformatics tools (e.g., sequence analysis and protein visualization tools) NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Please provide the following information for each course in which you used this unit:

Name of course	Grade level(s): Check all that apply	Please indicate course type: general, AP, IB, or Honors <i>(drop down)</i>
	<input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12	
	<input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12	
	<input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12	
	<input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12	

4. Which Bio-ITEST strand(s) did you teach?

- Genetic Testing only
- Genetic Research (DNA Barcoding) only
- Both Genetic Testing and Genetic Research (DNA Barcoding)

CONTINUE ON NEXT PAGE →

5. We are interesting in learning in which ways, if any, science teachers are able to provide information about science careers to their students. In what ways, if any, did you integrate information about science careers in general in your classroom this year? Please check all that apply:

- Student interviews with scientists
- Student research projects on science careers
- Student research on career paths
- Participation in BioExpo
- Field trip to worksite
- Guest speakers in classroom
- Other, please describe: _____

For questions 6 and 7, we encourage you to provide thorough responses.

6. What is the most significant impact this program has had on your students?

7. Please share any other comments you have:

Thank you for completing this survey!

If you have any questions about this study or further comments,
you may contact Davis Patterson at 206.525.5274 or Dina Kovarik at 206.957.3337.

Bio-ITEST Student Pre-Survey

Please answer the following questions to the best of your ability. You will not be graded and your teacher will not see your answers.

1. Please fill in the circle of the number that best reflects your agreement with each of the following:

	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
1.1 In general, I enjoy learning about science topics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2 I think it is important for people in our society to learn about science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3 I feel comfortable finding biological information in databases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.4 I am confident that I can find reliable resources to get genetic information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.5 I am interested in analyzing biological information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.6 I am interested in using computer programs to visualize 3D images of molecules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
1.7 I understand how databases that store biological information can be used in research.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.8 I am interested in how science knowledge can guide ethical decision making.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.9 I am aware of several different types of careers that involve biology.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.10 I understand how the analysis of biological information can be used in different careers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.11 I am confident that I can find reliable resources on the use of science in different careers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.12 I can see myself working in a career that involves understanding scientific information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CONTINUE ON REVERSE →

DEMOGRAPHICS

Below are demographic questions for study summary purposes only. **No individual information will ever be shared or reported** with anyone other than Bio-ITEST project staff.

2. YOUR NAME: _____
3. YOUR SCIENCE TEACHER'S NAME: _____ *(drop down)*
4. YOUR BIO-ITEST LESSON SET (Ask your teacher for the answer): *(drop down)*
 - Genetic Testing
 - Genetic Research (DNA Barcoding)
 - Both Genetic Testing and Genetic Research (DNA Barcoding)
5. YOUR SCHOOL: _____ *(drop down)*
6. YOUR DATE OF BIRTH : Month_____ Day_____ Year_____ *(require MM/DD/YYYY format online)*
7. YOUR GENDER: Female Male
8. YOUR GRADE: Freshman Sophomore Junior Senior
9. YOUR ETHNICITY: Which ethnicity do you primarily consider yourself?
 - Hispanic/Latino
 - Non-Hispanic/Latino
10. YOUR RACE: Which race do you primarily consider yourself?
 - White
 - Black/African American
 - Asian/SE Asian
 - American Indian
 - Alaskan Native
 - Native Hawaiian
 - Pacific Islander
 - Other (write in) _____

Thank you for filling out this survey!

Bio-ITEST Student Post-Survey

Please answer the following questions to the best of your ability. You will not be graded and your teacher will not see your answers.

1. NAME: _____

2. Please fill in the circle of the number that best reflects your agreement with each of the following:

	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
2.1 In general, I enjoy learning about science topics.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.2 I think it is important for people in our society to learn about science.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3 I feel comfortable finding biological information in databases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4 I am confident that I can find reliable resources to get genetic information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5 I am interested in analyzing biological information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6 I am interested in using computer programs to visualize 3D images of molecules.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
2.7 I understand how databases that store biological information can be used in research.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.8 I am interested in how science knowledge can guide ethical decision making.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.9 I am aware of several different types of careers that involve biology.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.10 I understand how the analysis of biological information can be used in different careers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.11 I am confident that I can find reliable resources on the use of science in different careers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.12 I can see myself working in a career that involves understanding scientific information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CONTINUE ON REVERSE →

3. Now we would like to hear how you think participating in the bioinformatics lessons might have affected you. Please rate yourself from “Very Low” to “Very High”

...BEFORE this unit

...and then NOW.

	Very Low 1	2	3	4	5	6	Very High 7
3.1 My understanding of ethical issues in genetic testing BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2 My understanding of ethical issues in genetic testing NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3 My understanding of the connection between biology content and issues that I might face in my personal life BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.4 My understanding of the connection between biology content and issues that I might face in my personal life NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.5 My confidence in accessing biological databases BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.6 My confidence in accessing biological databases NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you for filling out this survey!

Bio-ITEST Genetic Research Curriculum Student Survey

Please answer the following questions to the best of your ability. You will not be graded and your teacher will not see your answers.

1. Your answers to these questions will help the developers of the DNA Barcoding unit (*Using Bioinformatics: Genetic Research*) understand how the lessons might have affected your level of understanding and interest. Please think back to the time before you started the DNA Barcoding unit. Then rate yourself from “Very Low” to “Very High”

...BEFORE this unit

...and then NOW.

	Very Low 1	2	3	4	5	6	Very High 7
1a. My understanding of the connection between biology content and issues that I might face in my personal life BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1b. My understanding of the connection between biology content and issues that I might face in my personal life NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2a. My interest in how science knowledge can guide ethical decision making BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2b. My interest in how science knowledge can guide ethical decision making NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3a. My understanding of how databases that store biological information can be used in research BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3b. My understanding of how databases that store biological information can be used in research NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4a. My confidence in accessing biological databases BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4b. My confidence in accessing biological databases NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5a. My interest in analyzing biological information BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5b. My interest in analyzing biological information NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6a. My interest in using computer programs to visualize 3D images of molecules BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6b. My interest in using computer programs to visualize 3D images of molecules NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7a. My understanding of how the analysis of biological information can be used in different careers BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7b. My understanding of how the analysis of biological information can be used in different careers NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8a. My openness to working in a career that involves understanding scientific information BEFORE this unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8b. My openness to working in a career that involves understanding scientific information NOW	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CONTINUE ON REVERSE →

QUORUM REVIEW
APPROVED

APR 25 2011

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2. What were the most important things you learned about bioinformatics that you didn't know before the DNA Barcoding unit?
3. In what ways, if any, did the DNA Barcoding unit change how you think about future career possibilities for yourself?

DEMOGRAPHICS

Below are demographic questions for study summary purposes only. **No individual information will ever be shared or reported** with anyone other than Bio-ITEST project staff.

4. YOUR NAME: _____
5. YOUR SCIENCE TEACHER'S NAME: _____
6. YOUR COURSE NAME: _____
7. YOUR GENDER: Female Male
8. YOUR GRADE: Freshman Sophomore Junior Senior
9. YOUR ETHNICITY: Which ethnicity do you primarily consider yourself?
Hispanic/Latino
Non-Hispanic/Latino
10. YOUR RACE: Which race do you primarily consider yourself?
White
Black/African American
Asian/SE Asian
American Indian
Alaskan Native
Native Hawaiian
Pacific Islander
Other (write in) _____

QUORUM REVIEW
APPROVED

APR 25 2011

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