## Supplemental Material CBE—Life Sciences Education

Lindsay et al.

## Survey Questions 1. What is your current age? \_\_\_\_ 2. Gender a. Male b. Female c. Prefer not to answer 3. What is your home geographic is

- 3. What is your home geographic region of the US?
  - a. Northeast (New England)
  - b. Northeast (Mid-Atlantic)
  - c. Midwest (East North Central)
  - d. Midwest (West North Central)
  - e. South (Atlantic)
  - f. South (East South Central)
  - g. South (West South Central)
  - h. West (Mountain)
  - i. West (Pacific)
  - j. Not from the US
- 4. What is your faith tradition?
  - a. Baptist
  - b. Catholic
  - c. Christian (non-denominational)
  - d. Church of Christ/Disciples of Christ
  - e. Congregational
  - f. Episcopalian/Anglican
  - g. Jehovah's Witness
  - h. Jewish
  - i. LDS (Mormon)
  - j. Lutheran
  - k. Methodist/Wesleyan
  - 1. Orthodox (Eastern)
  - m. Pentecostal/Charismatic
  - n. Protestant (Other)
  - o. Reformed/Presbyterian
  - p. Seventh-day Adventist
  - q. Agnostic
  - r. Atheist
  - s. Other, please specify
- 5. What kind of high school did you attend?
  - a. Public
  - b. Public Charter
  - c. Private
  - d. Private religious
  - e. Homeschool
- 6. What year in school are you?
  - a. Freshman
  - b. Sophomore
  - c. Junior
  - d. Senior

- 7. In which category is your Major?
  - a. Natural Sciences (STEM)
  - b. Social Sciences
  - c. Arts & Humanities
  - d. Professional Studies
  - e. Religion & Philosophy
  - f. Other, please specify
- 8. What is the highest level of education obtained by either parent?
  - a. No diploma or degree
  - b. High school diploma
  - c. Some college
  - d. 4-year college degree
  - e. Master's Degree
  - f. Terminal Degree (PhD, MD, DDS, JSD, etc.)
- 9. Did one or both of your parents attend or graduate from (INSERT INSTITUTIONAL NAME) (Please mark ALL that apply)?
  - a. Father, attend
  - b. Father, graduate
  - c. Mother, attend
  - d. Mother, graduate
  - e. Neither attended
- 10. What courses have you taken in high school? (Mark all that apply.)
  - a. Earth Science
  - b. General biology
  - c. AP biology
  - d. Specialty biology (e.g. marine, environmental, etc.)
  - e. None of the above
- 11. To what extent did your high school biology course teach the topic of evolution?
  - a. Strong coverage
  - b. Average coverage
  - c. Weak coverage
  - d. No coverage
- 12. Did your high school teacher reveal personal views about evolution?
  - a. No, my high school teacher revealed no personal views.
  - b. Yes, my high school teacher clearly opposed evolution.
  - c. Yes, my high school teacher clearly supported evolution.
- 13. What was your reaction to the topic of evolution as taught in your high school biology course?
  - a. It was not taught in my high school
  - b. Acceptance without conflict
  - c. Concern about the validity of evolution
  - d. Feelings of mild conflict
  - e. Feelings of severe conflict leading to rejection of evolution
  - f. Feelings of neutrality; no strong reaction either way
- 14. How active were you in a religious community during high school?
  - a. Approximately weekly
  - b. Approximately monthly
  - c. Approximately quarterly

	e.	Not at all
15.	How o	often did you regularly receive biblical/scriptural training outside of weekly
	worsh	ip services during high school?
		Approximately daily
	<b>b</b> .	Approximately weekly
	c.	Approximately monthly
	d.	Approximately quarterly
	e.	Not at all
16.	How d	lo you understand the "six days of creation" in the Book of Genesis?
	a.	They are six consecutive twenty-four-hour days
	b.	They are six twenty-four-hour days with gap(s) of time
	c.	They are six periods of time of unknown length
	d.	They are six figurative days, not to be understood as real periods of time
	e.	I am not sure
17.	Was e	volution ever discussed in your religious community?
	a.	Yes
	b.	No
	c.	I am not sure
	d.	I have not been affiliated with any religious community
18.		does your religious community view evolutionary theory?
		positively
		neutral
		negatively
	d.	My religious community has both positive and negative views about
		evolutionary theory
		I do not participate in a religious community
19.		has been the most influential source of information for your opinion
		ing evolutionary theory? (Please rank the following on a scale from 1 to 5,
		g MOST influential and 5 being LEAST influential)
		Family
		Local clergy, local pastor, or youth leader
		Official Church authorities and/or publications
		Other sources (books, internet, magazines)
• •		Textbooks
20.		you recently heard or read a statement by a current religious authority or
		that expressed negative sentiments about evolution? Yes
		No
21.		nuch do you agree with this statement: The teaching of evolution was a
		versial issue in your family.
		Strongly Agree
	b.	Agree

d. Religious holidays only

- c. Disagree
- d. Strongly Disagree
- 22. How much do you think your parent's opinion of evolution has influenced your own views on the subject?
  - a. Very strongly influenced
  - b. Somewhat influenced
  - c. Influenced very little
  - d. Has had no influence
- 23. How much do you think the opinion of your parent(s) about evolution has been influenced by their own educational experience?
  - a. Very strongly influenced
  - b. Somewhat influenced
  - c. Influenced very little
  - d. Has had no influence
- 24. How much do you agree with this statement: "The teaching of evolution was a politically controversial issue in my community."
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree
- 25. How much do you agree with this statement: "It is immoral to alter embryonic DNA."
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree
- 26. How much do you agree with this statement: "Alternative ideas to evolution (e.g., Intelligent Design, Creationism) should be taught in a biology course."
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree
- 27. Science has shown vaccines to be highly effective with very low risk. Putting aside the issue of a parent's right to choose, do you agree that children should be vaccinated?
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree
- 28. What is your opinion on the issue of climate change?
  - a. Climate change is real and is influenced by human activity.
  - b. Climate change is real but is NOT influenced by human activity.
  - c. There are no valid data suggesting that climate change is real.
  - d. I have no opinion on this issue.
- 29. When someone is trained in science, they can no longer be religious.
  - a. Strongly Agree
  - b. Agree
  - c. Disagree

- d. Strongly Disagree
- 30. The concepts of science are frequently in conflict with your religious community's sacred scriptures.
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree
- 31. Please rank your agreement with the statement below for each scientific advancements (1 being most strongly <u>DISAGREE</u> and 4 being most strongly <u>AGREE</u>):

"The technological and scientific advances of the past centuries have changed the world. However, there are many negative consequences of this because the changes are often unnatural."

Genetically Modified Organisms (GMOs)
Reproductive technology
Gene therapy
Stem cells
Cloning

- 32. Extensive testing by the United States has shown the drug Laetrile (an extract from apricot pits) to be ineffective in the cure of cancer. The drug cannot be legally used in the United States; it is legal in other countries. Do you agree with the following statement: "If I am diagnosed with cancer, I would try Laetrile as a potential cure."
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree
- 33. How much do you agree with this statement: "Altering human DNA to treat adult disease is immoral."
  - a. Strongly Agree
  - b. Agree
  - c. Disagree
  - d. Strongly Disagree