



September 20, 2018

Arizona State Board of Education
1700 W. Washington Street
Executive Tower #300
Phoenix, AZ 85007

Re: Draft State Science Standards

Dear Members of the State Board of Education:

On behalf of the American Institute of Biological Sciences (AIBS), I write to request that the Board of Education reject the current draft Arizona Science Education Standards. The proposed standards fail to properly address important aspects of evolution science and remove climate change science from the high school curricula. The standards should be revised by science and science education experts.

Evolutionary biologist Theodosius Dobzhansky once wrote that “nothing in biology makes sense except in the light of evolution.” Dobzhansky offered these words decades ago, but they still ring true. Evolution is required to understand biology and, by extension, the many applications and benefits biology offers to society – from synthetic biology and personalized medicine to food and bioenergy production.

Arizona has made important investments in its universities. This has enabled companies throughout the state to hire skilled graduates who can leverage the knowledge generated by scientific research to create new products and expand existing markets. Importantly, in coming years, a growing number of jobs will require scientific expertise, even when those jobs do not require a college degree. Thus, it is important that science be properly taught to all students and at all grade levels.

According to the Arizona Commerce Authority, “Bioscience and health care in Arizona are thriving industries, treating patients and conducting groundbreaking research that will change the world. Arizona research institutions, industries and clinical care facilities collaborate in unique ways to create new products and improve care and outcomes.” The Authority reports on its

website that bioscience and health care industries generate \$21.4 billion in annual earnings for the state, and in 2015 were responsible for about 320,000 jobs in Arizona.

Arizona will jeopardize its prior investments and future economic opportunities if it waters down science standards by eliminating essential scientific concepts and fields of study to placate political interests.

Please reject the proposed standards until they fully and appropriately address evolution and climate change science. Arizona students deserve a strong, science-based curriculum.

Thank you for thoughtful consideration of this matter.

Sincerely,

Robert Gropp, Ph.D.
Executive Director