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February 6, 2015

Dear Members of the House Education Committee,

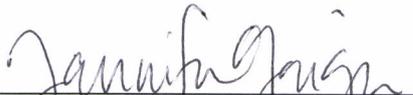
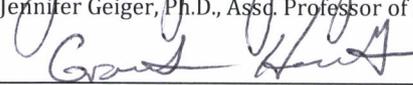
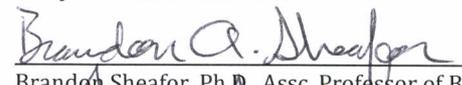
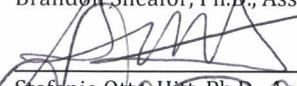
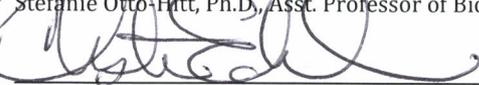
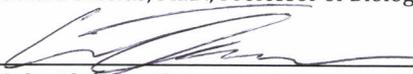
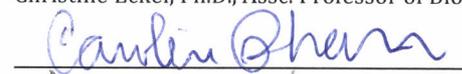
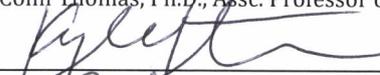
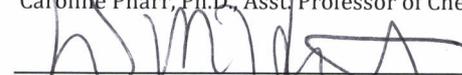
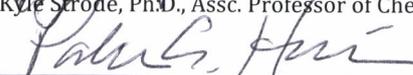
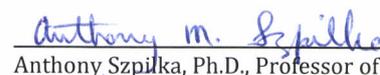
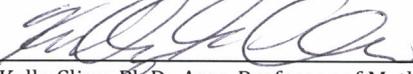
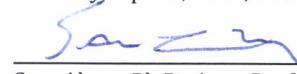
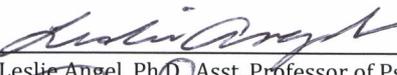
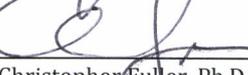
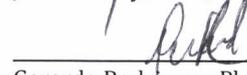
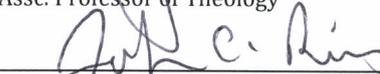
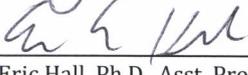
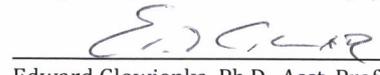
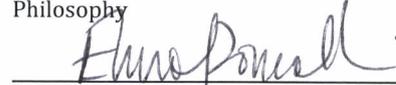
We the undersigned multi-discipline members of the Carroll College Faculty & Staff oppose House Bill 321 for several reasons. Now more than ever, when the citizens of our country and our world are facing the perils of infectious disease, malnutrition and hunger, cancer and other diseases, the necessity of providing our children a strong science education cannot be overemphasized. Currently, scientific literacy in this country is hovering around 30%, and our national efforts to compete on a global scale and produce productive, educated members of society mandate that we do not undermine science education by allowing non-scientific "alternative viewpoints" to be introduced into science curricula.

First, although the "whereas" statements are not codified, they do indicate legislative intent and should at least describe scientific concepts accurately, especially since part of HB321 is to emphasize critical thinking and scientific understanding. In the "whereas" statements, several scientific concepts are linked together that should not be. Evolution explains how species change over time. Contributions to evolutionary understanding include the processes random mutation and natural selection (among others), and evidence includes fossil discoveries, DNA evidence, and patterns observed in living organisms (among other observations). Evolutionary theory does not explain the origins of life or the origin of the universe. These are separate scientific questions, pursued in scientific disciplines outside of biology (chemistry, geology, physics). Additionally, by referring to "Darwin's theory of evolution," the statement erroneously suggests that Darwin created the theory of evolution. He did not. The scientific study of evolution pre-dates Darwin's contribution of natural selection to its understanding. Other important contributors to the theory of evolution include the Catholic monk Gregor Mendel, but we do not call it "Mendel's theory of evolution." Furthermore, the scientific community does not use "opinions" or "beliefs" to address questions related to the origins of life or the origins of the universe. The scientific community instead uses observable evidence and testable hypotheses to explain these phenomena. Questions indeed remain; we do not know for certain what the first living, replicating organism was, but we continue to ask the question and seek answers using the scientific method.

We oppose House Bill 321 because in the scientific community, scientific theories are not controversial. In fact, quite the opposite is true. In science, a theory is a mature, coherent body of interconnected statements, based on reasoning and evidence, of what are known to be the general laws, principles, and causes that explain some known or observed natural phenomena. It should be clear then that scientific theories, including evolutionary theory, are not controversial in the scientific community. Evolutionary theory explains how organisms on Earth have changed over time, having descended, with modification, from ancestors through the processes of genetic mutation combined with natural selection and genetic drift.

expressed in this statement are ours alone and do not necessarily represent the views of Carroll College.

Sincerely,

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 Kyle Strode, Ph.D., Assc. Professor of Chemistry	 David Hitt, Ph.D., Asst. Professor in Chemistry
 Patricia Heiser, Ph.D., Asst. Professor of Earth Science	 Anthony Szpilka, Ph.D., Professor of Physics
 Kelly Cline, Ph.D., Assc. Professor of Mathematics & Astronomy	 Sam Alvey, Ph.D., Assc. Professor of Biology
 Leslie Angel, Ph.D., Asst. Professor of Psychology	 John Rowley, Ph.D., Asst. Professor of Chemistry
 Christopher Fuller, Ph.D., Dean of Mission Assc. Professor of Theology	 Gerardo Rodriguez, Ph.D., Asst. Professor of Theology
 John Ries, Ph.D., Assc. Professor of Theology	 Barry Ferst, Professor of Philosophy
 Eric Hall, Ph.D., Asst. Professor of Theology & Philosophy	 Edward Glowienka, Ph.D., Asst. Professor of Philosophy
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