Dr. David S. Ronderos - biology professor; PhD, Neuroscience, UT Southwestern; Postdoctoral Fellowship, Johns Hopkins University School of Medicine; Member, Society of Catholic Scientists

I am a university professor and have taught evolutionary biology for the past 7 years. I'm also a devout Christian and practicing Catholic, and my faith is unquestionably the most important part of my life. I've spent years studying the complementarity of faith and science, especially evolutionary biology, and am familiar with "Intelligent Design (ID)".

Intelligent Design (ID) is not science: The natural sciences deal with nature and natural laws. Science, in the modern sense, is restricted only to the study of material and physical phenomena. By appealing to "intelligent agency" as an alternative to natural causes, ID is not science (despite persistent claims of ID proponents to the contrary). ID contains both (1) philosophical elements about causes and (2) theological elements about the relationship between an "intelligent designer" and nature. Importantly, ID is historically an outgrowth of "creationism", as was well-demonstrated in the 2005 *Kitzmiller v. Dover* trial. So, ID is a philosophical and theological position, not a scientific theory.

Biological evolution is well-established scientific theory: The phrase "it's only a theory" is frequently used to cast doubt on evolution. However, in a technical scientific sense, "theory" is often applied to well-supported ideas (like gravitational theory). Nearly every professional scientific organization and society in the country embraces evolutionary science while also rejecting ID. It is misleading to give students the impression that ID is a valid scientific theory, worthy of consideration alongside evolutionary theory. Unlike ID, evolutionary theory has withstood 165 years of rigorous testing and scientific advancements while gaining ever broader acceptance among scientists (a remarkable feat considering the structure of DNA was only discovered in 1953). Far from overturning evolution, recent discoveries have confirmed and extended it. The teaching of ID alongside evolution, as if these were two reasonable alternatives of similar scientific standing, gives students a false view of the scientific status of evolution and a misunderstanding of how the scientific process works. It risks putting our students in a disadvantaged position regarding scientific understanding generally.

Promoting ID in the science classroom will undermine religious belief: As a devout Catholic Christian, I am very concerned that promoting ID will have the unintended side-effect of undermining religious faith. If we tell students that all living species came about <u>either</u> by natural processes or by an "intelligent designer", God is depicted as a competitor against creation. It implies that students must choose between God and science - a false dichotomy. SB 2355 would inadvertently promote the view that faith and science are opposed. The ultimate effect may lead some students to reject either science or religion – neither of which is a desirable outcome of our educational system.

The theory of evolution is not inherently atheistic: Many faithful Christians have seen no conflict between faith and evolution, including Pope St. John Paul II, Pope Benedict XVI, Pope Francis, and St. John Henry Newman to name a few. The renowned evolutionary biologist and Orthodox Christian, Theodosius Dobzhansky, famously said that *"nothing in*

biology makes sense except in the light of evolution". SB 2355, by requiring that a particular theological viewpoint about an "intelligent designer" be taught as an alternative to evolution, implies that evolutionary biology is inherently atheistic – a religious claim that I and many other faithful Christians reject, based on belief in a God who is the creator and author of nature and natural laws. We should continue to have the freedom to teach our kids that science, especially evolution, is compatible with belief in God.