

## FAQ:

# How, or where, has a lack of intelligent design theory hindered scientific progress?

## a.k.a. How can intelligent design theory advance science?

**The Short Answer:** The primary way that a lack of ID has hindered science is in science's pursuit of empirical truth. If intelligent design is an actual cause for the origin of life, particularly human life, then the failure of the scientific enterprise to recognize that fact would mean that science is not fulfilling its goal to discover empirical truth. But there are more pragmatic considerations. One striking example where a failure to consider intelligent design has stifled scientific progress is with vestigial organs or "junk DNA." Evolution led people to assume they were functionless. Intelligent design might lead scientists to believe they have function. Scientists today are finding more and more function for types of DNA previously thought to be functionless. *Scientific American* recently stated that the "assumption [that the DNA was junk] was too hasty" and that "[t]he failure to recognize the importance of introns [previously thought to be a form of "junk DNA"] 'may well go down as one of the biggest mistakes in the history of molecular biology. Could evolutionary assumptions cause the "one of the biggest mistakes in the history of molecular biology?'" Of course, this example is aside from the obvious answer that science seeks truth (or at least it is supposed to), and if life was designed, and didn't evolve, then we would want to know that. Any finding of design is progress in science, if design is the right answer.

### **The Long Answer:**

According to the National Academy of Science (see *Teaching about Evolution and the Nature of Science*), a primary goal of science is to "understand nature," where "understanding" means "relating one natural phenomena to another and recognizing the causes and effects of phenomena." According to the NAS, "[p]rogress in science consists of the development of better explanations for the causes of natural phenomena." A natural phenomena is something which exists in the natural world. If intelligent design was a cause involved in the origin and diversification of life, then it would be scientific progress and aid in our understanding of nature to recognize that fact.

Philosophers often use the "correspondence theory of truth" truth to describe the aim of science. According to the "correspondence theory of truth," something is true if it corresponds to an actual fact. Science is supposed to discover things which correspond to facts. If it is true that intelligent design is a cause in the origin and diversification of life on earth, then to not consider intelligent design would be to cause science to not correspond to a fact about the origin and diversification of life on earth. To fail to consider intelligent design as a cause in the origin and diversification of life on earth would mean that science is not fulfilling its goal to develop better and truthful explanations for the causes of natural phenomena.

However, the failure to consider intelligent design may have more dire consequences than the mere failure to fulfill the noble, but somewhat abstract goal of simply better understanding our world and discovering truth. Science has helped better the quality of life of humanity in the past millennia, from providing technology to assist in communication, to solving many medical problems which have plagued humankind for ages. If science does not consider design, it is possible our understanding of the biology of the human body might be hindered, which ultimately could stifle medical research.

Here is an example: Evolutionary assumptions that "junk DNA" is functionless junk, the result of millions of years of duplicated, mutated, and discarded DNA sequences, has slowed research into the function of many types of "junk-DNA" Under evolution, many forms of junk-DNA have been seen as

meaningless evolutionary genetic baggage DNA. That such DNA might serve a purpose (and the following research that validated the claim) were sparked in the researchers because of notions of design.

In November 2003, *Scientific American* discussed that "junk-DNA" is not so junky (see "The Gems of "Junk" DNA"). This seems to be a good indication of the collapse of the evolutionary prediction that DNA should have lots of evolutionary relic vestigial junk, and the triumph of the prediction of design that there is probably more functionality than one would expect under evolution. The article states that there are at least 2 layers of functionality in "junk-DNA: "one layer is woven throughout the vast "noncoding" sequences of DNA that interrupt and separate gene ... [which is] transcribed into varieties of RNA that perform a much wider range of functions than biologists had imagined possible." Pseudogenes and microRNAs are also suggested as a possible source of functionality in DNA. These types of DNA--"the introns within genes and the long stretches of intergenic DNA between genes ... 'were immediately assumed to be evolutionary junk" and "long ago written off as irrelevant because they yield no proteins." Evolution tends to preserve what is needed, discard what isn't. However, because of the tendency to discard, biologists thought that what they didn't understand must have been not needed because it had been discarded by evolution. This article clearly shows that junk-DNA is the product of evolutionary predictions that were wrong. Indeed, the article admits that the "assumption [that the DNA was junk] was too hasty" and that "[t]he failure to recognize the importance of introns 'may well go down as one of the biggest mistakes in the history of molecular biology.'" This mistake was apparently caused by evolutionary assumptions--could evolutionary assumptions cause the "one of the biggest mistakes in the history of molecular biology?" Perhaps all biology does not make sense in the "light" of evolution. Intelligent design could have changed the assumptions and led the researchers to seek function earlier on. If discovery of the function of "junk-DNA" leads to advances in medical technology, perhaps our failure to discover that function sooner may have caused lives to be needlessly lost.

Intelligent design theory could have contributed much to what today amounts to many popularly false notions about vestigial organs. For example, the appendix and the thymus were for long thought to be a completely functionless vestigial organ. Imagine the progress that would have been made if the thymus had not been assumed for some time to be a useless relic of our evolutionary history! There may be many such examples of evolutionary assumptions hindering scientific (and medical) progress, and the *lack* of intelligent design hindering science.

Science seeks truth. These examples are an aside from the obvious answer that if life was designed, and didn't evolve, then we would want to know. Any finding of design is progress in science, if it is the right answer.

Some claim that intelligent design is a "science stopper." Indeed, evolution may make predictions which lead us to "bark up certain trees." Evolution may lead us up trees--but if they are the wrong trees, then we don't want to be barking up them, even if there are a lot of them. If intelligent design is the right tree, then we want to bark up it regardless of what we may or may not find. You don't measure a theory by how many trees it leads you to, but by if those are the right trees period. After all, alchemy and astrology made many predictions. We should be thankful that we abandoned those ideas despite their "predictive power."

Intelligent design is a viable scientific paradigm that relates to the fundamental question of where we came from and what the mechanistic limitations there are for Darwinian theory. If Darwinism has unnecessarily placed constraints scientific research as a result, Intelligent design could be freeing, not restrictive, for science.