

# Baumgardner Does not Use Statistics Correctly

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[globalflood.org/origins-debate.html](http://globalflood.org/origins-debate.html)

Editor:

John Baumgardner in his letter of April 3 attempts to give Llewellyn Jones a lesson in arithmetic. However, it is clear that Baumgardner needs lessons in probability and in how to submit technical papers on creation "science" to reputable scientific journals.

Mark Twain said: "There are three kinds of lies: lies, damned lies and statistics." Baumgardner purports to calculate the probability of life arising due to random interactions over the life of the universe. If true, Baumgardner would turn the scientific world upside down. But it is not true. Baumgardner uses statistics and probability theory improperly. He assumes randomness that doesn't exist. Indeed, by assuming randomness for non-random processes, one can show that almost any event is extremely improbable.

Let's run a scientific experiment. Go outside and pick up a small rock. The probability of that rock being on that spot on the Earth by chance alone is roughly the area of the stone divided by the surface area of the Earth, or about one chance in 10 to the 18th power (one followed by 18 zeros). If picking up the stone took one second, the probability of such an event occurring at this precise moment over the lifetime of the universe is now even smaller by another factor 10 to the 18th power! This simple event is so incredibly unlikely (essentially zero probability) that one wonders how it could be accomplished!

How can such an "unlikely" event occur? The problem is our initial false assumption of randomness. The rock and you arrived at that spot at that time by mechanistic processes. Probability theory fails when used improperly, as Baumgardner has done. Probability theory, like evolution theory, is valuable because it works under the appropriate conditions. Evolution theory explains the origin of species, but not the laws of gravity nor the origins of life.

Probability theory works for random processes, but has no applicability to deterministic events.

Questioning the origin of life is indeed scientific, and a new science has arisen to address it: abiotic chemistry. Life did arise on Earth about 3.5 billion years ago under the CONDITIONS prevailing at that time. The key science questions are: What were the initial conditions, and can these conditions be simulated and tested in the laboratory? No scientist is addressing the probability of life on this planet (but perhaps others). Nor does science address whether a creator created the necessary conditions for life to arise. These are questions outside science.

Baumgardner should present his arguments to the science community. Spouting such nonsense is an affront to the readers of the Monitor. By the way, check the April 17 issue of the respected science journal Nature, p. 638, where Baumgardner is mentioned. Baumgardner's views do not inspire respect for either Los Alamos National Laboratory or for the state of New Mexico.

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