## Evolution highly improbable: A response to R.N. Rogers

John Baumgardner 20 April 1997

The Los Alamos Monitor

globalflood.org/origins-debate.html

## Editor:

Mr. R. N. Rogers, in his 4/9/97 letter critiquing my remarks on the likelihood of the spontaneous origin of life, seems to have missed completely the crux of my argument. To summarize briefly, I argued the number of possible proteins is so astonishingly large relative to the minuscule fraction which could perform the elemental functions required in even the simplest organism that no conceivable random sorting process could ever find them.

Mr. Rogers wants to quibble over whether my estimate for the number of atoms in the universe accounts for the possible baryonic character of dark matter (it did) and whether my absurdly generous estimate for a maximum reaction rate was valid in view of a variety of factors that so obviously affect chemical reaction kinetics (it is). My deliberate intention was to choose a rate so large no one would have any desire to debate it. My purpose was to make the issue as clear and simple as possible.

I could have simplified things even further and just invoked the number of 1 in 10 to the 50th power that physicists commonly use as the probability below which an event can be assumed never to have occurred in the history of the universe. The number I suggested was 58 orders of magnitude more generous.

If Mr. Rogers really believes the details of chemical reaction rates are relevant to my argument, I would ask him if he actually can imagine a way to assemble polypeptides on the order of hundreds of amino acid units in length, to allow them to fold into their three-dimensional structures, and then to evaluate their properties, all within a small fraction of 100 picoseconds. The answer should be clear for someone who has spent his career at Los Alamos doing chemistry.

This interchange illustrates how prior metaphysical commitments can profoundly affect ones ability to think and reason clearly. This is why I believe it is so important for everyone, including scientists, to understand what the philosophical axioms are on which ones worldview is built and to be aware how commitments to these axioms can tangibly influence the reasoning process.

John Baumgardner