

## Re: Junk DNA: A hypothesis

**Source:** <http://sci.tech-archive.net/Archive/sci.bio.evolution/2005-01/0587.html>

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**From:** Larry Moran ([lamoran\\_at\\_bioinfo.med.utoronto.ca](mailto:lamoran_at_bioinfo.med.utoronto.ca))

**Date:** 01/25/05

Date: Tue, 25 Jan 2005 13:04:39 -0500 (EST)

On Tue, 25 Jan 2005 00:23:06 -0500 (EST),  
Jim McGinn <[jimmcginn@yahoo.com](mailto:jimmcginn@yahoo.com)> wrote:

> *Larry Moran wrote:*

>> *On Sun, 23 Jan 2005 22:54:58 -0500 (EST),*

>> *Jim McGinn <[jimmcginn@yahoo.com](mailto:jimmcginn@yahoo.com)> wrote:*

[snip]

>>> *To understand my position you'd have to be free of your  
>>> textbook-based assumption that population (and species) cannot  
>>> (also) be the focus of evolution.*

>>>

>>> *Done. I've been defending other levels of evolution for many years.*

>>> *I'm a fan of Gould, not Dawkins.*

>>>

>>> *Well then I'm perplexed. If you recognize that populations can be the  
>>> focus of evolution then what is the basis of your dispute? Surely  
>>> you're not suggesting that all biological entities cannot have  
>>> adaptations that enable success in unpredictable future environment.*

I dispute the idea that any modern organisms could be "selecting" today for alleles that have no effect on their current fitness but which will confer some advantage at some unpredictable time in the distant future.

My objection doesn't only apply to selection between individuals within a population. It also applies to genes within a genome, species within a clade, and competition between clades. If you can offer any convincing mechanism for this kind of natural selection then now is the time to put your money where your mouth is. Of course it would be wonderful if you could actually give an obvious example but that's probably asking too much given your history on sci.bio.evolution.

Note that it is not appropriate to postulate accidental effects or the fixation of alleles by chance. You have to explain how these alleles are being affected, right now, by NATURAL SELECTION for future benefit in order to justify your claim. Otherwise it's not an adaptation. It might help if you could identify some of these interesting mutations that have no fitness advantage right now but will have some fitness advantage one million years

sci.bio.evolution: Re: Junk DNA: A hypothesis

from now.

Larry Moran