

Re: Units of IBD

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- *From:* "Jim McGinn" <jimmcginn@xxxxxxxxxx>
 - *Date:* Tue, 4 Oct 2005 21:18:19 -0400 (EDT)
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Perplexed in Peoria wrote:

> Jim McGinn wrote:

>

>> IBD does have units. Use them.

<snip>

> I'm going to venture a guess. Let me know if I guess correctly.

> The "units" that you have in mind are "IBD-alleles-at-the-locus

> over all-alleles-at-the-locus".

Good. So you are cognizant of the units/dimensions. And all that subterfuge you presented earlier is, well, subterfuge. IBD (identical by descent) indicates the number of genes (in this instance I'm using the term gene to indicate alleles at locuses [which is really the only rationally consistent usage of gene]) that have been copied through osmosis from a specific individual *and* that are identical (not either variations or mutations). It does *not* indicate the number of genes that are identical.

Now see if you can do one of the following:

1) Explain why Hamilton assumed genes IBD of two individuals represents the relatedness (R) of these two individuals.

2) Explain Hamilton's rule using only the term "genes IBD" in place of R (relatedness).

If you can do either of these I will send you a check for \$10,000.

> That is the only sense I can

> make out of your claim that all probabilities have units.

Gee, this time it only took you about a week and a

half to answer the question honestly.

<snip>

Jim

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- *Follow-Ups:*
 - ◆ *Re: Units of IBD*
◇ *From:* Tim Tyler
 - ◆ *Re: Units of IBD*
◇ *From:* Perplexed in Peoria

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