THE JOHNS HOPKINS UNIVERSITY
SCHOOL OF MEDICINE

DEPARTMENT OF
MOLECULAR BIOLOGY AND GENETICS

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Dr. Byron Lane
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Toronto, Ontario M5S 1A8
CANADA

Dear Byron:

It was very good to hear from you. I'm sorry not to have replied earlier to your letter about proliferin and germin. Although these two growth-related proteins could have similar functions, I would be surprised if they were structural homologs. The prolactins (to which proliferin is closely related) all have six cysteines, with neighboring cysteines in intramolecular disulfide linkage. However, we don't yet know what the activity of proliferin is. We recently found that it is a placental hormone in mice and is secreted as a glycoprotein. We are in the position of knowing its amino acid sequence but not its function. Now we're trying to prepare the protein by recombinant DNA methods to learn whether it works as a growth factor, as I suspect.

Your second letter speaks of unexpected funding difficulties. Perhaps I could help by providing a few oligonucleotides. Please let me know. Also you should consider using Davis' λ gt 11 expression vector and screening plaques for germin-derived peptides with antiserum raised against germin. This vector has worked very well in a number of laboratories.

As for my plans to visit your part of the world, I would enjoy a visit with you and your colleagues (and with your wife), but I have no plans that take me near Toronto.

Please let me know about the oligonucleotides.

With best regards to you and your wife,

Sincerely,

Daniel Nathans

DN/lc