

# IMPERIAL CANCER RESEARCH FUND LABORATORIES

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Dear Mike---

Thanks for the copy of the grant request. Needless to say, I have not read it in detail (I doubt whether anyone ever will), but it looks like over-kill. I will be amazed if it is not simply rubberstamped. I look forward to reading the pink sheet. Do you think we will be obliged to equal our output plus 10% p.a.? The thought of seeing around 150 papers through the mills in the next five years is enough to keep me on permanent sabbatical.

Ray's talk at ICRF included a few tidbits I thought you might like to hear about, though word may drift back by other channels. (i) They find both phosphoserine and phosphothreonine in both src and sarc products. The p-ser in src (but not the p-thr in src) appears to be ~~not~~ formed by a cAMP dependent kinase since cAMP stimulates the phosphorylation of the <sup>ser</sup> residue in extracts. (ii) sfc product has been purified to about 90% purity, mainly with the aid of immunoabsorbant columns. The product phosphorylates a limited set of substrates and when added to an extract of uninfected CEF phosphorylates a small number of proteins, as yet unidentified (so he says). The "purified" stuff sticks to lots of columns, but not to phosphocellulose. (iii) The src product of two recovered ASV's (#165 and 1181 from tdl01) will score ~~high~~ (by both immunoppt and kinase assays) with marmoset but not with rabbit antisera, whereas the products of two others rASV's (#122 and 242, also from tdl01) will score in both assays with rabbit antisera. I mentioned our results with Peter's rASV's to him, and he expressed an interest (and willingness) to have them checked with marmoset antisera; he ~~will~~ may call you about this, or you could call him if you and Herman were interested. (iv) As I mentioned on the phone, the marmoset antisera bring down a phosphoprotein of about 60 k from chick, duck, quail, not mammalian cells. It is larger ~~by~~ (by a couple of thousand) than src product, with the difference in size apparently located in the C terminal half. The partial products (with V8 and chymotrypsin) are very similar, save for the one fragment which reflects the size difference (compared with SR-D src). The level of sarc is about 1/50 that of src in an infected CEF; there are no variations with growth conditions, QT lines versus QEF, etc. No kinase activity as yet and no success with the rabbit antisera.

I am enclosing a sketchy compendium of what I was able to glean of Astrin/Hayward results from Bill's brief talk. I don't know what is from Kimber and what is from SPAFAS. I will hear a lot more about endogenous DNA in the next week, since Dominique is coming here to review the data he and David Frisby have obtained with a large selection of birds. The most striking thing they have is the absence of much viral DNA in two species of jungle fowl, but they apparently have found fragments which anneal well in digests of pheasant DNA. Quail and other

birdsyield faint bands that can't be interpreted (shades of our own results).

I hope you haven't done much with Craig's paper, since I have decided to rewrite it in an entirely new fashion, with the fetal mouse data preceding the inbred mice. This suggestion came from Ed Southern and it makes a lot of sense to me.

I still don't have much to say about my own work, but I am fooling around with some polyoma transformed clones that display phenotypic differences upon addition of dex (I derived these clones in an elaborate experiment which was supposed to, but didn't, give me some clones in which dex rigidly controlled polyoma gene expression). I am also learning how to make mutants by trying to generate ts mutants in the little and middle t regions of polyoma early DNA. And I am still trying to revert ASV transformed cells by putting ~~the DNA of~~ <sup>the DNA of</sup> ~~MMTV~~ or hrt mutants of polyoma into the ASV provirus. Our first blots will hopefully be annealed this week if Ron remembers to bring the probes.

Cheers,

Harold