January 11, 1965

Dr. Robert Langridge
Children's Cancer Research
Foundation, Inc.
35 Binney Street
Boston, Massachusetts 02115

Dear Bob,

Had you been here when I read your letter, you could have helped pick me up off the floor. Although we think we have a much improved method for fractionating t-RNA, we have yet to produce any "pure" specific RNA chain. I have estimated that to produce 100 mg of pure t-RNA for your preliminary X-ray work would take approximately 15 gm of starting material and literally thousands of man-hours of work. Consider for example that most t-RNA's represent of the order of less than 5% of the population and even this is a mixture of 3 - 5 different "isomers" of that amino acid-specific class. For the purposes you want, each of these classes has to be separated.

I hope that we can progress to the point where your requirements could considered realistic, but unfortunately at the moment we've not gotten that far.

I relayed your request to Mike for a copy of his paper. My trip to Boston was much too short and I'm sorry I didn't get a chance to talk to you and many of the others I'd hoped to see. The next trip will certainly be for a longer time.

Sincerely,

Paul Berg

PB:cm