March 17, 1938

Dr. Gertrude Moore
2404 Broadway
Oakland, California

Dear Doctor Moore:-

In accordance with my promise, I am sending you some reprints which have to do with methods which we are employing in the laboratory and which I hope will be of some use to you in your work. I am also sending you a set of the instructions which we issue to persons from whom we are collecting samples of material for analysis, or to persons who are undertaking to collect samples for us. There will probably be little that is new to you in these instructions, but I consider them the minimal requirements for the collection of useful samples. I have spoken of the difficulties associated with this recent case. I might also refer to what I consider the necessary details in the collection of samples of tissue at necropsy. I do not believe it is possible to make a post-mortem diagnosis of lead intoxication from the analyses of tissues alone. Obviously one must be certainthat the lead was not incidental. Persons who have been working in lead trades may have a high lead content in their tissues without having had any symptoms, and without having had any injury as a consequence of the lead present. We have even found a relatively high lead content in the brain as a pure incident and without any relationship whatever to illness or death. It is thus quite apparent that lead can be present without having contributed in any way to the clinical picture. When, however, the clinical picture justifies the suspicion of lead intoxication of a fatal type, it should always be possible to find significant quantities of lead. We have found as much as a gram of lead in the body of a person with a fatal encephalopathy. Perhaps even more can be found in certain cases. In any case, however, I believe it is necessary to take large portions of all the representative tissues of the body. In cerebral cases it is quite nedessary to analyse the brain tissue, and in any case it is necessary to analyse the liver, the spleen, kidneys, lungs, a goodly sample of striated muscle as well as a good representative sample of flat bone, such as rib, and one of the long bones, such as the femur. With these analyses at hand and with the approximate weight of the organs of the body, one can calculate the total quantity of lead in the body with reasonable accuracy. Moreover with these data one can see

whether or not the deposition of lead in the tissues corresponds to the characteristic pattern. If it does not, some explanation of the discrepancy comes to be necessary, explanations which may be provided by references to the clinical data. In my opinion no other type of evidence can be accepted as conclusive for medico-legal purposes. I personally think it is utterly futile to attempt interpretations based on the analysis of a fragment of the skeleton, and of small portions of one or two of the other organs. I dare say I am not giving you any new information in expressing this point of view, but it occurs to me that you might be interested in my opinion with reference to these matters.

Allow me to thank you for your courtesy at the time of my visit to your laboratory. The information which you gave me was of great service in arriving at some sensible conclusion with reference to the Telepnev case. I hope I shall have an opportunity to repay your courtesy at some time. I also hope that the papers which I am sending you will serve in some measure in this direction.

Cordially yours,

RAK:is

Robert A. Kehoe, M.D.