February 23, 2015

News/Communications Office
National Heart, Lung and Blood Institute
National Institutes of Health

Dear Communications Office:

I am pleased to report that your valuable funding of the Blau lab subaward on Dr. Michael L. Terrin’s Program Project grant (NIH 5U01HL099997) has enabled us to make an important advance recently reported in the FASEB Journal in our article titled “Transient delivery of modified mRNA encoding TERT rapidly extends telomeres in human cells.” We have, of course, acknowledged your generous funding in the publication.

Specifically, we found that transient delivery of non-immunogenic modified mRNA encoding the telomerase protein TERT rapidly extended telomeres and increased the capacity of cells to divide. This discovery is important because, unlike previous methods of extending telomeres, it is temporary. The method also meets the other criteria we have established for a safe and useful telomere extension therapy: it is non-immunogenic, has no risk of genomic insertion, and rapid. Indeed, telomeres were extended in a few days by an amount sufficient to reverse over a decade of telomere shortening during normal aging.

Please find accompanying this letter press releases about our discovery enabled by your generous funding.

Thank you again for your support for this research.

Yours sincerely,

Helen M. Blau, Ph.D.
Professor, Director of Baxter Laboratory for Stem Cell Biology

Cc: Dr. Michael L. Terrin, PI