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Dr. Chatters was a fifth metacarpal that weighed approximately 2.6 grams. At Dr. Chatters' request, we radiocarbon dated a portion (0.7 grams) of the metacarpal using accelerator mass spectrometry ("AMS") for direct counting of ¹⁴C. AMS direct counting techniques permit dating of smaller samples than is possible with other radiocarbon dating methods. We obtained one radiocarbon date from the metacarpal sent by Dr. Chatters. The chemical fraction that we dated was a total amino acid fraction isolated by ion exchange chromatography. As instructed by Dr. Chatters, a sample of the Kennewick bone was then sent to the University of California, Davis for DNA testing at the laboratory of Dr. David Glenn Smith. The costs of our test were billed to the Benton County (Washington) Coroner.

5. The date we obtained from the metacarpal was 8410 ± 60 B.P. That date is an age in radiocarbon years. This is not the same as a date in calendar (or solar) years. To arrive at a date in calendar years, a radiocarbon age must be adjusted or corrected to compensate for various systemic and other factors that can affect the accuracy of the date obtained. First, the radiocarbon age must be adjusted to reflect any differences in the sample's stable carbon isotope values as compared to a standard or common scale (called "delta ¹³C"). In addition, the radiocarbon age must be adjusted to compensate for variations in initial ¹⁴C concentrations that occur in different types of carbon "reservoirs" or environments (such as those found in terrestrial as opposed to marine environments). After this correction has been made, the adjusted radiocarbon age must then be "calibrated" to allow for the fact that the level of ¹⁴C in living organisms has not stayed constant over time. Based upon the delta ¹³C values of the Kennewick sample, we estimated that the reservoir adjustment needed in this particular situation is approximately 530 ± 150 years, which will result in a reservoir-corrected radiocarbon age of 7880 ± 160. After calibration, this radiocarbon age equates to an age of approximately 8500 to 8950 calendar years B.P. (at a 1 sigma standard deviation range) or 8340 to 9200 calendar years B.P. (at a 2 sigma standard deviation range). This adjusted, calibrated age was reported in the May 22, 1998 issue of Science.

6. I have no reason at this time to question the accuracy of the date we obtained for Dr.