## Lead in albacore revisited: A cautionary call concerning the forecasted increase in metal production and use

 $\mathbf{YIGAL\ EREL}^1$ , RON PINHASI $^2$ , ALFREDO COPPA $^3$ , ADI TICHER $^1$ , OFIR TIROSH $^1$  AND LIRAN CARMEL $^1$ 

<sup>1</sup>The Hebrew University

Presenting Author: yigal.erel@huji.ac.il

Forty years ago, Settle and Patterson used archaeological and historical data to estimate rates of worldwide lead production since the discovery of cupellation, approximately 5,000 years ago. Here, we recorded actual lead exposure of a human population by direct measurements of the concentrations of lead in petrous bones of human individuals representing approximately 12,000 years of inhabitation in Italy. This documentation of lead pollution throughout human history indicates that, remarkably, much of the estimated dynamics in lead production is replicated in human exposure. Thus, lead pollution in humans has closely followed anthropogenic lead production. This observation raises concerns that the forecasted increase in production of lead and other metals might affect human health in the near future.

<sup>&</sup>lt;sup>2</sup>University of Vienna

<sup>&</sup>lt;sup>3</sup>Sapienza University of Rome