Review of: "Putative native South Amerindian origin of head lice clade F: evidence from head lice nits infesting human shrunken heads"

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Potential competing interests: The author(s) declared that no potential competing interests exist.

This is a landmark paper for the studies of ancient lice. I am impressed that molecular analysis can be done on lice from shrunken heads. In my 1990s experience examining shrunken heads for lice, I was impressed by the iridescent alteration of the nits/eggs and recently assumed that the heating of the heads would make DNA recovery problematic. Amanzougaghene and her colleagues show that nits/eggs from the head can be used for molecular analysis. This is an important point because shrunken heads are curated in many museums and are an untapped source of genetic data.

The haplogroup data provide new insights into the complexities of louse genetics related to their spread across the globe with human migrations. I am especially impressed with the number of novel haplotypes indicating remarkable genetic diversity. This research adds support to the American origin of clade F. This indicates a long period of isolation of human populations such that clade F derived from clade B.

The authors might want to include this reference in their study. Reinhard, K.J., de Araújo, E.P., Searcey, N.A., Buikstra, J. and Morrow, J.J., 2020. Automontage microscopy and SEM: A combined approach for documenting ancient lice. *Micron*, *139*, p.102931.