

## Life Sciences Reporting Summary

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### ► Experimental design

#### 1. Sample size

Describe how sample size was determined.

Our sample sizes were determined by the number of individuals excavated from the cemetery sites and the number of individuals to which we were permitted access to by the The Archaeology Council at Mexico's National Institute of Anthropology and History (INAH) and the Teposcolula-Yucundaa Archaeological Project.

#### 2. Data exclusions

Describe any data exclusions.

No data were excluded from the analyses. Three genomes (Tepos\_10, Tepos\_20, Tepos\_37) were excluded partway through analyses due to the lower quality or lower coverage of these genomes, the reasons for which are explained in the main text and supplementary information.

#### 3. Replication

Describe whether the experimental findings were reliably reproduced.

Experimental findings were reproduced in that both non-UDG and UDG libraries from the same DNA extracts, for each of the ten positive individuals from the epidemic cemetery, yielded *Salmonella enterica* Paratyphi C genomic DNA after capture.

#### 4. Randomization

Describe how samples/organisms/participants were allocated into experimental groups.

Samples were allocated to experimental groups based on the cemetery site from which the individuals were excavated from.

#### 5. Blinding

Describe whether the investigators were blinded to group allocation during data collection and/or analysis.

Blinding was not necessary to this study as neither human participants or animals were used.

Note: all studies involving animals and/or human research participants must disclose whether blinding and randomization were used.

## 6. Statistical parameters

For all figures and tables that use statistical methods, confirm that the following items are present in relevant figure legends (or the Methods section if additional space is needed).

n/a Confirmed

- ☐ ☒ The exact sample size ( $n$ ) for each experimental group/condition, given as a discrete number and unit of measurement (animals, litters, cultures, etc.)
- ☒ ☐ A description of how samples were collected, noting whether measurements were taken from distinct samples or whether the same sample was measured repeatedly.
- ☒ ☐ A statement indicating how many times each experiment was replicated
- ☒ ☐ The statistical test(s) used and whether they are one- or two-sided (note: only common tests should be described solely by name; more complex techniques should be described in the Methods section)
- ☒ ☐ A description of any assumptions or corrections, such as an adjustment for multiple comparisons
- ☒ ☐ The test results (e.g.  $p$  values) given as exact values whenever possible and with confidence intervals noted
- ☒ ☐ A summary of the descriptive statistics, including central tendency (e.g. median, mean) and variation (e.g. standard deviation, interquartile range)
- ☒ ☐ Clearly defined error bars

See the web collection on [statistics for biologists](#) for further resources and guidance.

## ► Software

Policy information about [availability of computer code](#)

## 7. Software

Describe the software used to analyze the data in this study.

All software used to analyze the data in this study is publicly available online. MALT is open source and freely available from <http://ab.inf.uni-tuebingen.de/software/malt>. Custom scripts were used in some instances to parse the data generated by publicly available software.

For all studies, we encourage code deposition in a community repository (e.g. GitHub). Authors must make computer code available to editors and reviewers upon request. The *Nature Methods* [guidance for providing algorithms and software for publication](#) may be useful for any submission.

## ► Materials and reagents

Policy information about [availability of materials](#)

## 8. Materials availability

Indicate whether there are restrictions on availability of unique materials or if these materials are only available for distribution by a for-profit company.

No unique materials were used

## 9. Antibodies

Describe the antibodies used and how they were validated for use in the system under study (i.e. assay and species).

No antibodies were used

## 10. Eukaryotic cell lines

a. State the source of each eukaryotic cell line used.

No eukaryotic cell lines were used

b. Describe the method of cell line authentication used.

No eukaryotic cell lines were used

c. Report whether the cell lines were tested for mycoplasma contamination.

No eukaryotic cell lines were used

d. If any of the cell lines used in the paper are listed in the database of commonly misidentified cell lines maintained by [ICLAC](#), provide a scientific rationale for their use.

No commonly misidentified cell lines were used

## ► Animals and human research participants

Policy information about [studies involving animals](#); when reporting animal research, follow the [ARRIVE guidelines](#)

## 11. Description of research animals

Provide details on animals and/or animal-derived materials used in the study.

No animals were used

12. Description of human research participants

Describe the covariate-relevant population characteristics of the human research participants.

This study did not involve human research participants