# Supplementary Note 1 – Laboratory workflow

## **Sample Selection**

The modern and ancient DNA extracts used in this study were previously tested positive for DNA from *Mycobacterium leprae* (Schuenemann et al. 2013, Mendum et al. 2014, Schuenemann et al. 2018a) or *Treponema pallidum* (Arora et al. 2016, Knauf et al. 2018, Schuenemann et al. 2018b). Existing libraries of the previous studies were used. For a comparison of the three methods under investigation, an additional shotgun sequencing of all samples was performed to determine the percentage of target DNA in the libraries prior to enrichment.

#### **Ethics statement**

For all samples used in this study only existing sequencing libraries were used, and no new material was collected. Statements about ethical approval and research permission can be found in the original publications (Supplementary Table 1). In this study only sequencing data of the two bacteria and no human data was generated.

#### Array capture

The array capture was performed according to the methods described in **Hodges et al. 2007**. The array design was identical to **Schuenemann et al. 2013** (*M. leprae*) and **Arora et al. 2016** (*T. pallidum*). Probe length on both arrays was 60 bp. Modern and ancient samples positive for *M. leprae* were pooled equimolar and captured on two arrays. For the *Treponema* samples, three pools for the capture were prepared: one for modern and ancient syphilis samples respectively and a third of positive extracts originating from different species of nonhuman primates. After the hybridization, the products were quantified by qPCR as described in **Schuenemann et al. 2013**. After determination of the sufficient number of cycles the pools were amplified and after quantification on an Agilent 2100 Bioanalyzer the pools were diluted for sequencing on a

HiSeq4000 using a 75bp single-end kit for the first replicates and 75bp paired-end for the following two replicates.

#### **In-solution capture with RNA baits (MYBaits)**

The in-solution capture was performed using biotinylated RNA baits from the MYBaits from MYcroarray® according to manufactures instructions. The first replicate was performed in the post-amplification laboratory of the Ancient DNA Laboratory at the Kiel University after the manual of version 1.3.8. The following two replicates were performed in the post-amplification laboratory of the AG Palaeogenetics at the Institute for Archaeological Science in Tübingen after the manual of version 3.02. Samples were pool identical to the array capture and the capture was followed by a similar procedure to prepare for sequencing.

For the baits for *M. leprae* the reference Br4923 (NC\_011896) was used as a base for the bait design with a 2x tiling as well and 76,490 baits in the final set. Bait length was 80 bp for *M. leprae*. With regard to *T. pallidum* the baits spanned the simian derived *T. pallidum* ssp. *pertenue* strain Fribourg-Blanc reference genome (NC\_021179.1) with a 2x tiling as described in **Knauf et al. 2018**. Bait length for *T. pallidum* is 100bp and the bait set contains 19,925 unique probes.

The two rounds from the first repetition were sequenced on a HiSeq4000 with a 75bp singleend kit. The two rounds of the second and third repetition using a 75bp paired-end kit.

#### **In-solution capture with DNA baits (probes derived from arrays)**

The in-solution capture with array probes was performed at the Max Planck Institute for the Science of Human History in Jena.

For *M. leprae*, probes were designed based on strains TN (NC\_002677.1) and Br4923 (NC\_011896.1). For targeted enrichment of *Treponema pallidum* DNA probes were designed on the basis of *T. pallidum* ssp. *pallidum* strains Nichols (NC\_000919.1), SS14 (NC\_021508.1),

Sea 81-4 (NZ\_CP003679.1), Mexico A (NC\_018722.1), *T. pallidum* ssp. *endemicum* strain Bosnia A (NZ\_CP007548.1), and *T. pallidum* ssp. *pertenue* strain Fribourg-Blanc (NC\_021179.1). The tiling density is two and one bp for *M. leprae* and *T. pallidum*, respectively. For both target organisms the probe length is 52 bp with an additional 8bp linker sequence (CACTGCGG) as described in **Fu et al. 2013**. Duplicated probes and probes with low sequence complexity were removed. This resulted in 1,125,985 and 1,593,068 unique probe sequences for *T. pallidum* and *M. leprae*, respectively. For each target species the probe set was spread on two Agilent one-million feature SureSelect DNA Capture Arrays. The capacity of the two arrays was filled by randomly duplicating probes from the probe set. The arrays were turned into in-solution DNA capture libraries as described in **Fu et al. 2013**. All three replicates were sequenced on a HiSeq4000 using a 75bp paired-end kit.

# Supplementary Note 2 - Bioinformatics and Statistical Analysis

The sequencing data of all samples was processed with the nf-core/eager pipeline (**Peltzer et al. 2016**, **Fellows Yates et al. 2020**, <a href="https://github.com/nf-core/eager">https://github.com/nf-core/eager</a>). Including mapping with BWA, removal of duplicates, and the generation of damage plots. The enrichment factor for all enriched libraries was calculated by dividing the percentage of endogenous DNA after enrichment by the percentage of endogenous DNA in the shotgun sequencing.

All statistical analysis was performed in R version 426 3.4.3 (R Core Team 2017). The significance between the different features mean coverage, standard deviation of the mean coverage, percentage of the genome covered five-old, fragment length and ancient DNA (aDNA) specific damage in the data of the three tested protocols was assessed in each sample individually with a mixed model as implemented in the lme4-package for R (Bates et al. 2015). This model contained the replicate as a random slope factor allowing between-replicate variation in the main effect. Subsequently, p-values were corrected for multiple testing with the Bonferroni correction. Pairwise Tukey HSD post hoc tests were calculated from this model using the *Ismeans* package for R (Lenth 2016).

Also, significant differences between the individual replicates (grouped by age and pathogen) were assessed using a linear model as implemented in the stats-package for R (R Core Team (2019)).

The percentage of unique reads was calculated by dividing the number of unique reads by the number of total reads mapped.

#### Variance within each method

After calculating the absolute value of the pairwise differences between the replicates for each method we used one-way ANOVA to determine the significance of these differences followed by Tukey HSD post hoc tests.

### **Specificity of the three tested methods**

We also used one-way ANOVA to determine the significance of differences in the ratio of specific reads for each sample individually followed by Tukey HSD post hoc tests. Subsequently, p-values were corrected for multiple testing with the Bonferroni correction. General mycobacterial or treponemal reads, as well as specific reads, were determined using the MALT algorithm (Vågene et al. 2018). For the ratio, the number of specific reads was divided by either the number of total mycobacterial or treponemal reads.

## Data upload

For the samples derived from human patients the reads mapping to the human genome were removed from the fastq files prior data upload with the --strip\_input\_fastq flag of nf-core/eager (Peltzer et al. 2016, Fellows Yates et al. 2020, <a href="https://github.com/nf-core/eager">https://github.com/nf-core/eager</a>) while mapping to the hg19 reference genome.

Supplementary Note 3 – Results of the Bioinformatics and Statistical Analysis

#### **Capture efficiency**

Detailed results of the tests for significant differences in the mean coverage, standard deviation of the mean coverage, percentage of the genome covered five-fold, enrichment factor, as well as aDNA typical damage and fragment length for each individual sample can be found in Supplementary Table 2 and Supplementary Figures 1 & 2.

Mean coverage and the percentage of the genome covered at least five-fold are highly dependent on the enrichment factor and therefore the results for the two features mirror that of the enrichment factor (see Main Manuscript and Supplementary Table 2).

For the features enrichment factor and mean coverage in the ancient data of both bacteria, the RNA bait capture with two rounds of hybridization shows the best results. However, adjusted p-values do not reach significance. The fragment length is in the data of ancient samples of both bacteria the shortest in the in-solution capture with DNA probes. The differences in fragment length are significant in both cases and increase with the bait length used with the longest fragments in the RNA bait capture with either one or with two rounds of hybridization.

The evenest coverage as represented by lowest values of the standard deviation of the mean coverage is seen in the DNA bait capture in the ancient *T. pallidum* samples and in the data of the RNA bait capture with two rounds of hybridization in the ancient *M. leprae* samples. In both cases, differences are not significant.

The largest portions of the genome covered at least five-fold result from RNA bait capture with two rounds of hybridization in ancient *M. leprae* sample (three to twenty times higher) and from DNA bait capture in the ancient *T. pallidum* samples (in average a hundred times higher,

results of statistical significance in Supplementary Table 2). However, also in these cases the adjusted p-values do not reach significance.

An important characteristic of ancient sequencing libraries is the occurrence of the substitution of C by T at the fragment ends (**Briggs et al. 2007**). This is due to the post-mortem decay of the DNA and can be used to authenticate ancient DNA. In the data of both bacteria the array capture results in the highest portion (up to two times higher) of damaged fragment. However, differences are not significant.

Also, in the modern samples enrichment factor and mean coverage are the highest (between three and six hundred times higher) in the data of the RNA bait capture with two rounds of hybridization for both bacteria. All adjusted p-values for the enrichment factor and most of the adjusted p-values for the mean coverage are significant.

The evenest coverage in the modern data is found in the array capture data for *T. pallidum* and in the DNA bait capture data for the *M. leprae*. For *T. pallidum* these differences are significant. The percentage of the genome covered five-fold is highest for modern *M. leprae* in the RNA bait capture with two rounds of hybridization and for *T. pallidum* in the DNA bait capture. However, only for *M. leprae* differences are significant.

The longest fragment in the modern data are as well found in the methods with the longest baits. For *M. leprae* the RNA bait capture, as for the ancient sample with either one or two rounds of hybridization, results in the longest fragments. For *T. pallidum* the DNA bait capture results in the longest fragments, there the differences also reach significance.

All comparisons between the different methods were also performed between the individual replicates. Detailed results for this comparison can be found in Supplementary Table 3. The general pattern found in sample wise comparison was confirmed with higher statistical significance in the tests performed per replicate.

The number of unique reads in the data of the first and second round of hybridization with the RNA baits does not significantly increase with the second round (Supplementary Figure 3). Showing that the increase in the percentage of endogenous DNA increases while library complexity decreases.

#### Variance within each method

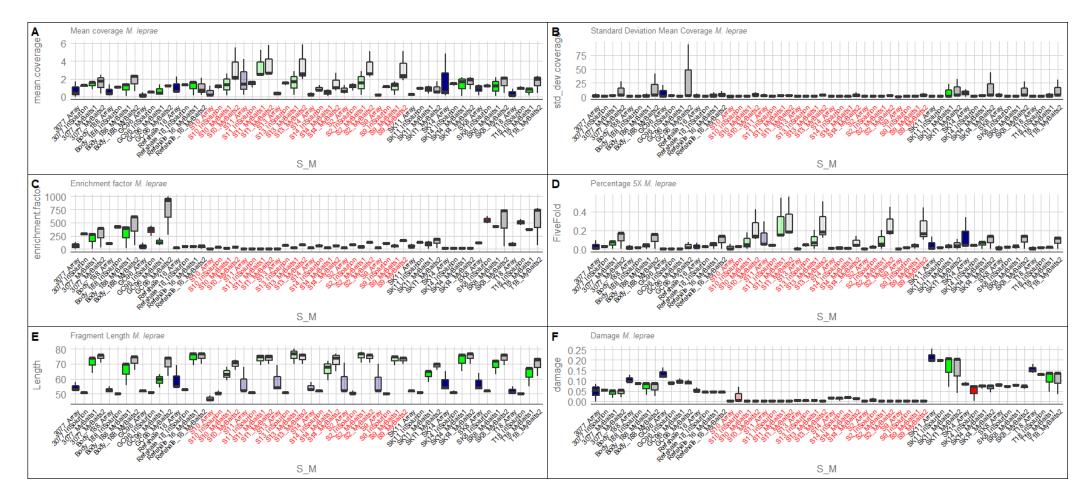
The choice of method significantly affects the differences between the replicates for all tested features in modern and ancient *M. leprae* genomes (Supplementary Table 6). The insolution capture using DNA probes shows the smallest differences between the replicates besides the enrichment factor. Here the array capture produces the most similar results between the replicates (Supplementary Table 6).

For the data from the ancient and modern syphilis, the variance between the replicates is significantly affected as well. The array capture shows hereby the smallest differences between the single replicates.

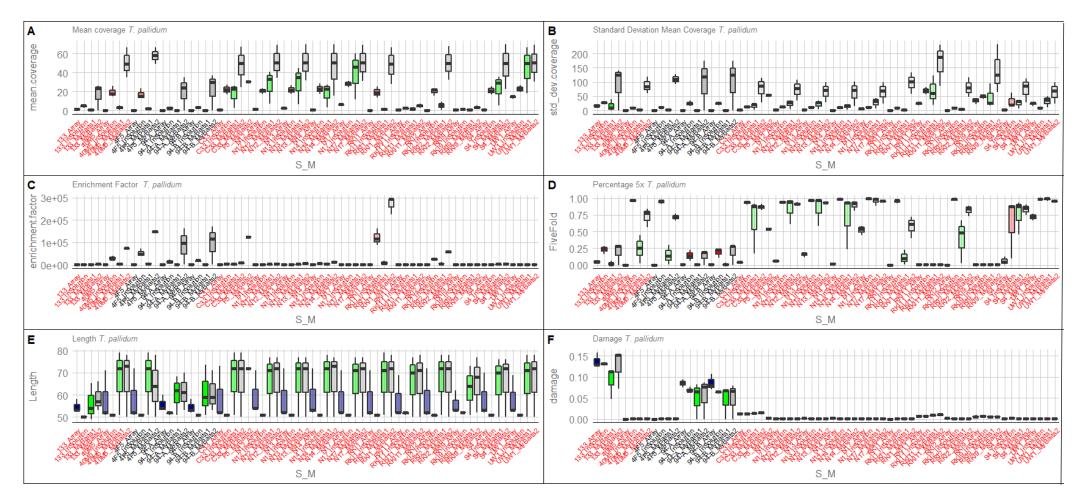
### **Specificity of the different methods**

The significance of differences in the ratio of specific reads for either *M. leprae* or *T. pallidum* compared to mycobacterial and treponemal reads, respectively, in each of the ancient and modern samples of both tested bacteria, was assessed (Supplementary Table 4). There is no statistical significance between the methods besides in the data of the ancient *M. leprae* samples. Here the RNA bait capture with two rounds shows significantly the highest ratios of specific reads of *M. leprae* to mycobacterial reads in total. For the ancient *Treponema pallidum* samples, the RNA bait capture with two rounds shows the highest proportions of specific reads.

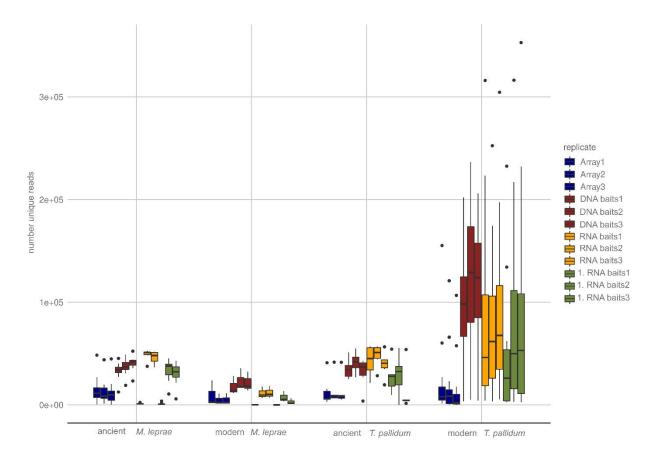
For the samples of modern *M. leprae*, there is no statistical significance but here the insolution capture with DNA probes shows the highest proportions of *M. leprae* specific reads. In the modern samples, only one round of capture with RNA baits yields the highest specificity.



Supplementary Figure 1: Comparison of (A) mean coverage, (B) standard deviation of the mean coverage, (C) enrichment factor, (D) and the percentage of the genome covered 5 fold, (E) distribution of the fragment length and (F) frequency of the aDNA damage for the ancient and modern strains of *M. leprae*. Three independent replicates were performed for each method. Labels of the ancient samples are in black and for the modern samples in red. Boxplots of the array are blue, of the DNA bait capture red and the RNA baits capture is green and grey for the first and second round, respectively.



Supplementary Figure 2: Comparison of (A) mean coverage, (B) standard deviation of the mean coverage, (C) enrichment factor, (D) and the percentage of the genome covered 5 fold, (E) distribution of the fragment length and (F) frequency of the aDNA damage for the ancient and modern strains of *T. pallidum*. Three independent replicates were performed for each method. Labels of the ancient samples are in black and for the modern samples in red. Boxplots of the array are blue, of the DNA bait capture red and the RNA baits capture is green and grey for the first and second round, respectively.



Supplementary Figure 3: Number of unique reads for the three replicate batches of the three tested methods. The number of unique reads in the second round of hybridization with the RNA baits does not strongly increase compared to the first round.

# Supplementary Table 1: List of all samples used in this study group according to organism and age together with the original publications.

Group	Sample	Age	Organism	Host species	publication	Endogenous DNA (%) shotgun data
				nonhuman		0,00
	40M5160407	modern	T. pallidum	primate	Knauf et al. 2018	,
				nonhuman		0,00
modern	4F5230307	modern	T. pallidum	primate	Knauf et al. 2018	
T. pallidum				nonhuman		0,00
retrieved	RKI1	modern	T. pallidum	primate	Knauf et al. 2018	
from	Bullat		- W.	nonhuman	W 6 1 1 2010	0,01
nonhuman	RKI11	modern	T. pallidum	primate	Knauf et al. 2018	0.00
primates	RKI2	madara	T nallidum	nonhuman	Knauf et al. 2018	0,00
	RKIZ	modern	T. pallidum	primate nonhuman	Kriaur et al. 2018	0,01
	RKI9	modern	T. pallidum	primate	Knauf et al. 2018	0,01
	N12	modern	T. pallidum	human	Arora et al. 2016	0,02
	N13	modern	T. pallidum	human	Arora et al. 2016	0,02
	N14	modern	T. pallidum	human	Arora et al. 2016	0,01
modern	N17	modern	T. pallidum	human	Arora et al. 2016	0,09
T. pallidum	C33	modern	T. pallidum	human	Arora et al. 2016	0,01
	S4	modern	T. pallidum	human	Arora et al. 2016	0,02
	UW1	modern	T. pallidum	human	Arora et al. 2016	0,65
	3077	ancient	M. leprae	human	Schuenemann et al 2013	0,22
	GC96	ancient	M. leprae	human	Schuenemann et al 2018a	0,08
	Body 188	ancient	M. leprae	human	Schuenemann et al 2018a	0,14
Ancient	SK11	ancient	M. leprae	human	Schuenemann et al 2018a	0,45
M. leprae	T18	ancient	M. leprae	human	Schuenemann et al 2018a	0,10
	Refshale 16	ancient	M. leprae	human	Schuenemann et al 2013	1,37
	SK14	ancient	M. leprae	human	Mendum et al. 2014	5,01
	SK8	ancient	M. leprae	human	Mendum et al. 2014	0,11
	S10	modern	M. leprae	human	Schuenemann et al 2013	2,10
	S11	modern	M. leprae	human	Schuenemann et al 2013	59,12
modern	S13	modern	M. leprae	human	Schuenemann et al 2013	1,09
M. leprae	S14	modern	M. leprae	human	Schuenemann et al 2013	0,67
	S2	modern	M. leprae	human	Schuenemann et al 2013	0,66
	S9	modern	M. leprae	human	Schuenemann et al 2013	0,47
	94-A	ancient	T. pallidum	human	Schuenemann et al 2018b	0,00
ancient	133	ancient	T. pallidum	human	Schuenemann et al 2018b	0,01
T. pallidum	94-B	ancient	T. pallidum	human	Schuenemann et al 2018b	0,00

# Supplementary Table 4: Comparison of the specific reads of the three tested protocols.

Supplemen	age	Organism	Chisq	on of the sp Pr(>Chisq)	Array	RNA baits1	RNA baits2	DNA baits	Array - RNA baits1	Array - RNA baits2	Array - DNA baits	RNA baits1 - RNA baits2	RNA baits1 - DNA baits	RNA baits2 - DNA baits	p.adjust
40M5160407	modern	T. pallidum	1.26	0.35	0.28	0.33	0.33	0.28	0.53	0.55	1.00	1.00	0.54	0.56	1.00
4F5230307	modern	T. pallidum	0.73	0.57	0.30	0.33	0.32	0.28	0.85	0.97	0.93	0.99	0.54	0.76	1.00
C33	modern	T. pallidum	1.02	0.43	0.33	0.35	0.36	0.30	0.92	0.91	0.82	1.00	0.49	0.47	1.00
94-A	ancient	T. pallidum	1.48	0.29	0.33	0.35	0.38	0.31	0.92	0.50	0.95	0.84	0.66	0.26	1.00
133	ancient	T. pallidum	7.43	0.01	0.28	0.32	0.34	0.29	0.09	0.01	0.95	0.61	0.18	0.03	0.17
94-B	ancient	T. pallidum	2.38	0.15	0.30	0.35	0.37	0.29	0.53	0.24	1.00	0.91	0.44	0.19	1.00
N12	modern	T. pallidum	0.96	0.46	0.32	0.35	0.35	0.30	0.86	0.86	0.91	1.00	0.51	0.52	1.00
N13	modern	T. pallidum	0.87	0.50	0.33	0.35	0.35	0.30	0.91	0.92	0.87	1.00	0.54	0.54	1.00
N14	modern	T. pallidum	0.92	0.47	0.33	0.35	0.35	0.30	0.88	0.88	0.90	1.00	0.52	0.53	1.00
N17	modern	T. pallidum	0.99	0.45	0.33	0.35	0.35	0.30	0.85	0.85	0.91	1.00	0.51	0.50	1.00
RKI1	modern	T. pallidum	0.97	0.45	0.29	0.33	0.33	0.29	0.69	0.73	1.00	1.00	0.56	0.60	1.00
RKI11	modern	T. pallidum	2.69	0.12	0.00	0.00	0.00	0.00	0.13	1.00	0.66	0.17	0.56	0.76	1.00
RKI2	modern	T. pallidum	1.00	0.44	0.32	0.33	0.33	0.29	0.94	0.95	0.78	1.00	0.47	0.49	1.00
RKI9	modern	T. pallidum	3.50	0.07	0.00	0.01	0.00	0.00	0.10	1.00	1.00	0.10	0.14	1.00	1.00
S4	modern	T. pallidum	0.70	0.58	0.32	0.35	0.35	0.31	0.85	0.87	0.98	1.00	0.65	0.66	1.00
UW1	modern	T. pallidum	1.31	0.34	0.32	0.36	0.36	0.30	0.63	0.65	0.99	1.00	0.45	0.47	1.00
3077	ancient	M. leprae	0.79	0.53	0.99	0.93	0.76	0.99	0.98	0.57	1.00	0.78	0.98	0.57	1.00
GC96	ancient	M. leprae	0.37	0.77	0.80	0.69	0.68	0.94	0.98	0.97	0.95	1.00	0.81	0.79	1.00
Body 188	ancient	M. leprae	0.54	0.67	0.95	0.71	0.68	0.96	0.84	0.80	1.00	1.00	0.82	0.77	1.00
SK11	ancient	M. leprae	0.61	0.63	0.98	0.85	0.74	0.97	0.92	0.67	1.00	0.95	0.92	0.68	1.00
T18	ancient	M. leprae	0.60	0.63	0.96	0.86	0.73	0.98	0.97	0.71	1.00	0.92	0.94	0.64	1.00
Refshale_16	ancient	M. leprae	0.86	0.50	1.00	0.99	0.92	0.99	1.00	0.55	1.00	0.63	1.00	0.57	1.00
SK14	ancient	M. leprae	0.75	0.55	0.99	0.97	0.91	0.99	0.99	0.59	1.00	0.78	0.99	0.59	1.00
SK8	ancient	M. leprae	0.64	0.61	0.98	0.85	0.74	0.99	0.93	0.68	1.00	0.94	0.91	0.64	1.00
S10	modern	M. leprae	6.40	0.02	0.99	1.00	1.00	0.99	0.81	0.17	0.29	0.51	0.08	0.01	0.23
S11	modern	M. leprae	22.37	0.00	1.00	1.00	1.00	0.99	0.21	0.08	0.01	0.89	0.00	0.00	0.00
S13	modern	M. leprae	12.10	0.00	1.00	1.00	1.00	0.99	0.75	1.00	0.00	0.71	0.01	0.00	0.03
S14	modern	M. leprae	11.12	0.00	1.00	1.00	1.00	0.99	0.83	0.30	0.02	0.10	0.07	0.00	0.04
S2	modern	M. leprae	13.49	0.00	1.00	1.00	1.00	0.99	0.04	0.08	0.21	0.94	0.00	0.00	0.02
<b>S</b> 9	modern	M. leprae	5.62	0.02	0.99	1.00	1.00	0.99	0.15	0.03	0.93	0.64	0.32	0.06	0.32

# Supplementary Table 6: Comparison of the variance within each method tested.

Organism	Feature	Sample Group	Chisq	Pr(>Chisq)	Array	DNA baits	RNA baits1	RNA baits2	Array - RNA baits1	Array - RNA baits2	Array - DNA baits	RNA baits1 - RNA baits2	RNA baits1 - DNA baits	RNA baits2 - DNA baits
	Mean	ancient	19.44	2.21E-04	0.97	0.19	0.89	1.04	0.00	0.99	0.99	0.01	0.00	0.91
	Coverage	modern	30.28	1.21E-03	0.76	0.34	1.42	2.10	0.59	0.18	0.00	0.01	0.00	0.17
	standard deviation	ancient	39.76	1.20E-05	4.22	0.10	4.01	24.20	0.72	1.00	0.00	0.75	0.00	0.00
	Mean Coverage	modern	28.90	2.35E-03	1.15	0.19	0.95	2.52	0.10	0.96	0.01	0.25	0.00	0.00
M. leprae	Enrichment	ancient	32.09	5.00E-04	36.60	48.60	152.00	277.00	0.99	0.09	0.00	0.16	0.00	0.06
1/21 top: we	Factor	modern	30.65	1.01E-06	4.44	14.80	28.90	12.70	0.17	0.00	0.36	0.03	0.97	0.01
	5Xpercentage	ancient	27.64	4.33E-06	0.57	0.01	0.03	0.09	0.01	0.40	0.17	0.43	0.00	0.00
	<b>F</b>	modern	35.26	1.07E-04	0.04	0.02	0.12	0.21	0.93	0.10	0.00	0.02	0.00	0.06
	damage	ancient	29.31	1.92E-03	4.50	0.42	6.75	5.50	0.00	0.23	0.83	0.00	0.00	0.71
	Length	ancient	24.89	1.63E-02	8.78	0.78	5.78	4.56	0.00	0.21	0.04	0.01	0.07	0.85
		modern	10.30	1.62E-02	0.03	0.01	0.03	0.04	0.35	0.95	0.65	0.13	0.03	0.92
	Mean	ancient	44.24	1.34E-09	0.20	1.44	0.68	21.60	0.97	1.00	0.00	0.99	0.00	0.00
	Coverage	modern	101.62	2.20E-16	0.49	5.02	13.80	22.80	0.18	0.00	0.00	0.00	0.00	0.00
	standard deviation	ancient	45.97	5.76E-10	1.79	7.80	10.60	108.00	0.97	0.92	0.00	1.00	0.00	0.00
	Mean Coverage	modern	140.84	2.20E-16	2.47	6.22	20.60	58.40	0.85	0.00	0.00	0.01	0.00	0
T. pallidum	Enrichment	ancient	27.10	5.62E-06	158.00	5.346.00	1.286.00	74.836.00	0.99	1.00	0.00	0.99	0.00	0.00
1. раншит	Factor	modern	14.08	2.80E-03	182.00	7.047.00	2.979.00	5.823.00	0.03	0.68	0.11	0.37	0.96	0.67
	5Xpercentage	ancient	23.05	3.95E-05	0.01	0.09	0.02	0.17	0.09	0.98	0.00	0.18	0.12	0.00
	SApercentage	modern	39.93	1.11E-08	0.03	0.06	0.23	0.08	0.81	0.00	0.48	0.00	0.95	0.00
	damage	ancient	36.99	4.62E-08	4.00	0.22	12.50	10.70	0.20	0.00	0.01	0.00	0.00	0.76
	Longth	ancient	101.76	2.20E-16	12.30	0.10	18.00	18.30	0.00	0.01	0.00	0.00	0.00	1.00
	Length	modern	21.26	9.31E-05	0.02	0.00	0.05	0.06	0.63	0.07	0.02	0.00	0.00	0.94

# **Supplementary Table 7: Comparison of the costs per reaction.**

in-solution capture with array derived probes										
Product	Supplier	ArtNr.	amou nt	Price (€)	Price (€)/rxn	Machines				
2x Hi-RPM Hybridization Buffer	Agilent	5190-0403	25 ml	480	0,65	Vortexer				
bait production Herculase II Fusion DNA	Ü		200ul 400	432	16,20	centrifuge				
Polymerases	Agilent	600679	rxn	456	2,28	centrifuge for plates Magnetic rack (96 well				
MinElute PCR purification Kit	Qiagen	28004	50 rxn 100	127	2,54	plate) Magnetic rack (2 ml				
Acetic acid 100%	Sigma ThermoFis	5438080100	ml	61	0,00	tubes)				
Dynabeads MyOne T1	her ThermoFis	65601 65152105050	2 ml	546	10,92	Thermocycler				
SeraMag Speedbeads Oligonucleotide (primers,	her	250	15 ml	283,73	0,19	Lightcycler				
blocking oligos)	sigma ThermoFis		30 rxn	533,5	17,78	Pipettes				
GeneAmp 10x PCR buffer	her ThermoFis	N8080006	1,5 ml 500	195	3,90					
Cot-1 DNA	her	15279011	ug	310	1,55					
Denhardt's Solution 50x	Sigma	D2532-5ML	5 ml	172	0,21					
Additional reagents				sum/r xn	56,23					
		05030-	500							
SDS 20 %	Sigma ThermoFis	500ML-F	ml	107						
SSC 20%	her	AM9763 324506-	1 L 100	101						
0.5 M EDTA	Sigma	100ML	ml	45						
HPLC H2O	Sigma	270733-1L	1 L	24						
5 M NaCl	Sigma ThermoFis	S5150-1L	1 L 100	68,3						
1 M Tris-HCl, pH 8	her	AM9855G	ml	57,25						
Tween-20 100%	Sigma	P1379-25ML	25 ml	13						
1 M NaOH	Applichem	A6579,1000 S7899-	1 L 100	27,2						
3 M Sodium acetate pH 5.2	Sigma	100ML	ml 500	32,4						
PM buffer	Qiagen ThermoFis	19083	ml	63,6						
Salmon SpermDNA	her	15632011	5 ml	133						

Array										
		Art		Pric	Price					
Product	Supplier	Nr.	amount	e (€)	(€)/rxn	Machines				
Oligo aCGH/ChIP-on-		5188-	Blocking Agent + 2x Hi-RPM							
chip Hybridization Kit	Agilent	5220	hybridization buffer 25 rxn	461	18,44	Vortexer				
				304,						
blocking oligos	sigma		06, BO8, BO10	64	10,15	Thermoshaker				
	Fisher	102051		61,3						
BD Plastipak	Scientific	94	100 x	8	0,61	Thermocycler				
Hybridization Gasket		G2534-				Hybridization				
Slide Kit	Agilent	60005	100	2036	20,36	Oven				
SureSelect DNA Capture		G3358				1 bigger glass				
Array 1 M	Agilent	A	1	613	613,00	bowl				
Microarray Wash Buffer		5188-				2 smaller glass				
Kit	Agilent	5222	WB 1, WB 2 40 rxn	208	5,20	bowls				
Herculase II Fusion DNA										
Polymerases	Agilent	600679	400 rxn	456	2,28	Array chamber				
MinElute PCR										
purification Kit	Qiagen	28004	50 rxn	127	2,54	centrifuge				
				sum/						
Addtional ragents				rxn	672,59	Magnetic mixer				
		270733								
HPLC H2O	Sigma	-1L	1 L	24		Waterbath				
						tweezers				
						rack for slides				
						pipettes				
						Lightcycler				

MyBait Poite Poite									
Product	Supplier	Art Nr.	amount	Pric e (€)	Price (€)/rxn	Machines			
MyBait Kit Herculase II Fusion DNA			48 rxn	5000	104,17	Vortexer			
Polymerases MinElute PCR	Agilent	600679	400 rxn	456	2,28	centrifuge centrifuge for			
purification Kit	Qiagen	28004	50 rxn	127	2,54	plates			
Additional reagents				sum/ rxn	108,99	Magnetic rack (96 well plate)			
	ThermoF	AM985		57,2		Magnetic rack (2			
1 M Tris-HCl, pH 8	isher	5G P1379-	100 ml	5		ml tubes)			
Tween-20 100%	Sigma	25ML 270733	25 ml	13		Thermocycler			
HPLC H2O	Sigma	-1L	1 L	24		Lightcycler			
						Pipettes			

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