Time		Title (Presenter)								
1030			Welcome (Greger Larson)							
		Domestication								
1045		177	Selection analysis applied to time series of ancient genotype data reveals how medieval religious reform shaped the genomes of modern chickens (Greger Larson)							
1100	a	119	Genome sequence of a 5310-year-old maize cob provides insights into the early stages of maize domestication (Jazmín Ramos Madrigal)							
1115	eatre	178	ns (Julia Best)							
1130		45	3,000 years of genome evolution in sorghum (Oliver Smith)							
1145	두	128	Next-Generation-Sequencing of tetraploid wheat accessions and the origins of agriculture in the Near East (Hugo Oliveira)							
1200	l e		Coffee Break							
1215	ecture.	5	Ancient viticulture uncorked: nuclear DNA from archaeological seeds sheds light on the history of grape varieties and berry color (Nathan Wales)							
1230	Le	176	Contemporary wolves trace their ancestry to an expansion from Beringia following the Last Glacial Maximum (Liisa Loog)							
1245		101	Genome sequences of 6000-year-old barley provide new insights into the history of crop domestication (Verena Schuenemann)							
1300		42	An ancient genomic perspective on the horse domestication process (Ludovic Orlando)							
1315			Lunch							
			Isotopes and Populations			Ancient DNA Recovery				
1415		36	Using $\delta$ 13C and $\delta$ 18O time series from livestock teeth to reveal the seasonality of mobility, foddering, and stress during the Bronze and Iron Ages in eastern Kazakhstan ( <b>Taylor Hermes</b> )		85	Improving The Recovery Of Ancient DNA Sequences From Highly Degraded Material (Isabelle Glocke)				
1430	eatre	15	Phosphate, carbonate, and Selected Ion Monitoring (SIM) oxygen isotope ratios in enamel apatite from Kromdraai Cave, South Africa: documenting diet, diagenesis and source water variation.  (Linda Reynard)		16	REALbaits capture on degraded DNA.  Population genomics without a reference genome (Fátima Sánchez Barreiro)				
1445	Thea	22	Resuming Resmo - sorting out mobility from diet using microsampling, multi-isotope analysis and modelling (Gunilla Eriksson)	ex	48	Identifying experimental conditions improving in solution target enrichment for ancient DNA (Antoine Fages)				
1500	Lecture -	107	Stable isotope ( $\delta$ 13C, $\delta$ 15N and $\delta$ 34S) and elemental analysis as markers for cultural heterogeneity and causes of death of a miner's population from Silbojokk in northern Fennoscandia during the 17th century (Markus Fjellström)	Annex	23	Relationship estimation from ancient DNA (Torsten Günther)				
1515	Le	66	Investigating early Neolithic vertical pastoralism movements of sheep in the Central Pyrenees by stable isotope analyses: data from a modern reference sample and archaeological specimens from Els Trocs (late VIth millennium cal BC; Spain) (C. Tornero)		135	Identify ancient microbial strains with < 100 palaeogenomic reads (Zhemin Zhou)				
1530		133	"Isoscapes" of tooth enamel phosphate oxygen isotopes (2180p) help to identify human mobility in Early Bronze Age Britain (Maura Pellegrini)		52	Automated reconstructions of nucleosome and methylation maps with epiPALEOMIX (Kristian Hanghøj)				
1545			Coffee Brea	ık						
			Molecular Inference		M	lethods, Resolution and Effects				
1630		136	Pasteurization, Processing, Palaeoenvironment – Applicability of modern dairy reference fats in archaeological lipid residue analysis using $\delta 13C$ of single fatty acids (Sarah Pederzani)		50	Zonkey: a simple, accurate and sensitive method to identify first generation equid hybrids in archaeological assemblages (Charleen Gaunitz)				
1645	tre	111	Towards the identification of plant residues in prehistoric archaeological artefacts: integrating lipid and protein approaches (Andre Carlo Colonese)		46	LSD: a novel method to detect positive selection in tree time-slices (Pablo Librado)				
1700	Theatre	123	Compound-specific radiocarbon dating of food residues preserved in archaeological pottery vessels (Emmanuelle Casanova)	yex	49	MALT: Fast alignment and analysis of metagenomic DNA sequence data applied to the Tyrolean Iceman (Alexander Herbig)				
1715		150	Combining ancient DNA analysis and radiocarbon dating (Petra Korlevic)	Annex	17	20,000 bones and counting - Insights into zooarchaeology and Ancient DNA Preservation using Bulk-Bone Metabarcoding (Mike Bunce)				
1730	Lecture	41	A new general model for ancient DNA decay based on paleogenomic meta-analysis (Logan Kistler)		109	A new methodological approach for the extraction and derivatization of absorbed lipid residues from very small and very old sample amounts of ceramic potsherds for molecular analysis by (GC-MS) and (GC-C-IRMS) (Vasiliki Papakosta)				
1745		27	A comparison of methods for estimating evolutionary timescales using ancient DNA (Jun Tong)		6	Effect of x-ray irradiation on ancient dna in sub-fossil bones – Guidelines for safe x-ray imaging (Alexander Immel)				

## Programme detail (posters) – Wednesday 14<sup>th</sup> September

Title	Presenter	Position
(2) Botanical and faunal stable isotope analysis at Baishui River valley (Shaanxi, China) to reconstruct crop management, climate change and palaeodietary during late Neolithic	Xin Wang	1
(7) Carbon and Nitrogen isotopic analysis on human and animal bones of Nanwa site, Henan Province, China	Guowen Zhang	2
(13) In-solution capture assay to screen for preservation and contamination of ancient human DNA	Marieke van de Loosdrecht	3
(18) The identity of the mysterious 'new glume wheat' of early European agriculture	Beata Czajkowska	4
(20) Full Mitochondrial Genomes of Central European Upper Palaeolithic Woolly Mammoths (Mammuthus primigenius)	James Fellows Yayes	5
(21) Osteometric and mtDNA analyses from the trading post of Empúries (north-east of the Iberian Peninsula) show first evidence of cattle trade during the Early Roman period	Lídia Colominas	6
(24) Genome Evolution of Trondheimers Through the Last 1000 Years	Inge Lundstrøm	7
(25) Burnt to a crisp? The high-throughput DNA sequencing of charred grains.	Jannine Forst	8
(31) Identifying Mycobacterium tuberculosis in ancient bone and dental calculus through DNA and protein analysis.	Aina Karlstrøm	9
(32) Story Hidden in the Cabinet? -Unveiling the Grape Evolution by Using Historical Herbarium Specimens	Hsiao-Lei Liu	10
(34) Nubian Barley evolution in a drought stress environment	William Nicholson	11
(40) The early agriculture and its impact in NW China	Xiaoqiang Li	12
(43) Genetics as a means of investigating cultural contact: The case of the Pitted Ware grave sites of the Island of Gotland in Scandinavia.	Alexandra Coutinho	13
(44) Whole mtDNA sequencing in Alpine populations and the genetic history of the Neolithic Tyrolean Iceman	Valentina Coia	14
(53) Characterization of cosmetic sticks at Xiaohe Cemetery in early Bronze Age Xinjiang, China	Yimin Yang	15
(55) Paleoproteomics for cultural heritage investigation, state of the art and perspectives.	Enrico Cappellini	16
(58) Multi-omics study of the Iceman's stomach content shows main components of a Copper Age meal: fat, wild meat and cereals.	Niall O''Sullivan	17
(59) Biosphere mapping- the next step.	Jane Evans	18
(61) Lipids absorbed in Epicardial pottery reveal large-group meat consumption in the oldest known domestic structure on the Barcelona plain.	Adrià Breu	19
(67) A comparative dataset of dentine and dental calculus from medieval Ireland	Susanna Sabin	20
(71) MALDI-FT-ICR-MS for archaeological lipid residue analysis	Ester Oras	21
(72) Screening for ancient tuberculosis DNA using MALT – a metagenomic approach	Åshild Vågene	22
(73) The First and Second Plague Pandemic in Bavaria, Germany - Preliminary Screening Results	Marcel Keller	23

Time	Title (Presenter)										
	Isotopes and Crops										
1000		84	First molecular and isotopic evidence of millet processing in prehistoric pottery vessels (Carl Heron)								
1015		39	Wheat yields in ancient China: a study based on the carbon isotope discrimination of charred grains (Xinying Zhou)								
1030		92	The trials and tribulations of strontium isotope analysis of ancient charred grains (Amy Styring)								
1045	eatre	161	Gone to seed? Earliest direct evidence of plant processing in prehistoric Saharan pottery (Julie Dunne)								
1100		157									
1115			Coffee Break								
1145	Ĕ	122	The effect of trophic level on individual amino acid δ15N values in a terrestrial ruminant food chain (lain Kendall)								
	O		Palaeo Microbiomes and Pathogens								
1200	cture	38	Implications for mid Miocene Diet from Gomphotherium Phytoliths in Tooth Calculus (Yan Wu)								
1215	Lect	121	Digging deen into the ancient human oral microhiome: Metanroteomics challenges and nersner								
1230		11	Proteomic evidence for dietary biomolecules entrapped in dental calculus (Camilla Speller)								
1245		3	Detecting ancient tuberculosis beyond the reach of ancient DI lesions (David Minnikin)	NA wit	h lipid	d biomarkers and characteristic bone					
1300		54	Paleoproteomic analysis of early Pleistocene fossil remains (En	nrico (	Cappe	llini)					
1315			Lunch								
			Ancient Plants and Animals			Identification and Estimation					
1415		9	Origin of plant organic matter in permafrost revealed by ancient DNA and pollen analyses (Heike Zimmermann)		64	The painting technique of the giant Buddhas of Bāmiyān (Afghanistan) (Leila Birolo) The organic coating from a decorated human					
1430	tre	171	Examining rabbit domestication: an historical, archaeological and genomic approach (Evan Irving-Pease)		113	skull from the Neolithic site of Nahal Hemar (Israel): molecular evidence for the use of a vegetal substance (Blandine Courel)					
1445	are Theatre	30	Ancient DNA from waterlogged oak wood provides a new baseline for evolutionary and archeological studies on temperate deciduous tree species (Stefanie Wagner)	Annex	56	Impact of modern cattle feeding practices on milk fatty acid stable carbon isotope compositions emphasise the need for caution in selecting reference animal tissues and products for archaeological investigations (Mélanie Roffet-Salque)					
1500	ecture	33	Demonstrating mollusc seashells as new genetic archives of the past (Clio Der Sarkissian)		19	Tomb 7 at Monte Alban: Use, Antiquity and Importance (Noreen Tuross)					
1515		79	The evolution of bison in Europe during the last 50,000 years (Diyendo Massilani)		1	Point count estimation of articulated husk phytoliths of foxtail millet and its prospective use in agricultural archaeology (Xue Shang)					
1530		83	Degradation and recovery of DNA from 44,000 year-old rodent samples from Africa <b>(Eva-Maria Geigl)</b>		14	Identifying Scottish Soldiers from the Battle of Dunbar (1650) (Andrew Millard)					
1545			Coffee Brea	ık							
			Ancient Plants and Animals		Мо	bility, Trade and Material Culture					
1630	ā	76	Genetic turnovers and northern survival during the last glacial maximum in European brown bears (Erik Ersmark)		35	Capture of ancient genomic DNA of individuals recovered from a Medieval Alemannic gravesite provides evidence for high mobility of fellowships during the 7th century CE (Niall O"Sullivan)					
1645	Theatre	162	Ancient DNA reveals differences in behaviour and sociality between brown bears and extinct cave bears (Gloria Gonzalez Fortes)	ex	28	Trade and Empire in Ancient Bahrain: Bioarchaeological and Isotope Geochemical Perspectives (Damien Huffer)					
1700	•	8	Population Genomics of Greenlandic polar wolves (Mikkel-Holger S. Sinding)	Annex	145	Paired radiocarbon dating on human samples and camelid textiles from Pica 8, northern Chile (Francisca Santana Sagredo)					
1715	Lecture	69	The genetic processes leading up to the woolly mammoth's extinction (Patrícia Pečnerová)		149	Illuminating the prehistory of northern Europe through lipid residue analysis of putative oil lamps (Harry Robson)					
1730		129	Genomics of elephants and their extinct relatives (Eleftheria Palkopoulou)		60	Direct earliest evidence of dog domestication in East Asia (Yaowu Hu)					
1745		80	Survival of eggshell peptides over millions of years in Africa is due to mineral binding (Beatrice Demarchi)		63	Drinking in the Andes: organic residue analyses of Inca aríbalo jars from Catamarca, Argentina (Irene Lantos)					
1800			Keynote – "A talk 10 years in the m	akin	g" (I						

## Programme detail (posters) – Thursday 15<sup>th</sup> September

Title		Presenter	Position
(75)	Investigating dietary habits by stable isotope analyses ( $\delta$ 13C and $\delta$ 15N) in bone collagen of cave bear (Ursus spelaeus) in southern latitudes of Europe during Late Pleistocene: the case of Toll Cave (MIS3; Spain)	Ivan Ramírez Pedraza	1
(77)	Palaeolipidomics: developing a new lipid biomarker proxy to detect cereal processing in archaeological pottery	Simon Hammann	2
(82)	Molecular markers in keratins from Mysticeti whales for species identification of baleen in museum and archaeological collections	Caroline Solazzo	3
(86)	Genetic structure and geographic partitioning of Lama guanicoe sub- populations during the late Holocene	Cinthia Abbona	4
(87)	Comparison of human and leprosy DNA content in petrous bones and teeth from St. Jorgen, Denmark (1270 - 1350 AD)	Lisa Boehme	5
(88)	The Need for Resolution: Addressing the lack of multidisciplinary integration in Medieval plague research.	Meriam Guellil	6
(90)	Expanding the oral microbiome reference set	Cody Parker	7
(91)	Genetic Analysis of Neolithic individuals from Switzerland	Anja Furtwängler	8
(93)	DNA quality in different types of archaeological plant materials	Maria Lundström	9
(95)	Maternal Genetic Ancestry and Legacy of 10th Century AD Hungarians	A. Szecsenyi- Nagy	10
(96)	DamageProfiler: Calculation of damage patterns in next generation sequencing data from ancient DNA	Judith Neukamm	11
(102)	The efficacy of high-throughput sequencing and target enrichment on charred archaeobotanical remains.	Heidi Nistelberger	13
(103)	Can the use of querns and millstones make a contribution of Sr to the human diet: An experiment in digestive Sr-isotope uptake.	Lucie Johnson	14
(104)	Stable isotope evidence for diet and subsistence patterns of the prehistoric populations of south-eastern Uruguay	Patricia Mut	15
(106)	The preservation of DNA from bone, dentin, and calculus from Gombe National Park and Pinnacle Point in Africa.	Anne Stone	16
(108)	Ancient DNA from cats - a paleogenetics perspective into past distributions and patterns of dispersal of Felis silvestris	Claudio Ottoni	17
(110)	Stable Isotope Analysis of the Blick Mead Dog: A proxy for dietary reconstruction of Mesolithic Hunter-Gatherers	Bryony Rogers	18
(114)	Dietary practices in medieval Islamic Portugal: using stable isotopes to explore food consumption in 11-12th century Lisbon.	Alice Toso	19
(116)	Finns in the light of ancient mitochondrial DNA	Kerttu Majander	20
(118)	Mobility between the Aegean and the Levant in the Late Second Millennium BCE: inference from ancient DNA of pigs	Meirav Meiri	21
(120)	Mitochondrial DNA analysis of first Neolithic farmers from Anatolia and Syria: implications for the Neolithisation of Europe	Luke Reynolds	22
(124)	Identifying plague in 17th century London: a discussion of preliminary results	Elizabeth Nelson	23
(126)	Investigating the possible brotherhood of two Egyptian mummies Nakht-Ankh and Khnum-Nakht via ancient DNA analysis	Konstantina Drosou	24

Time			Title (Preser	iter)						
			Old Tiny Critters			Ancient Individuals and Populations				
1000	Lecture Theatre	180	Ancient DNA and Gastrointestinal Parasites (Hannah Ryan)		74	A high-coverage Yersinia pestis Genome from a 6th century Justinianic Plague Victim (Michal Feldman)				
1015		81	6380-year-old oral pathogens from hunter-gatherer remains found in Kiel bay: A metagenomic approach to ancient DNA (Sabin-Christin Kornell)		12	Geo-genetic population structure and gene flow in Eurasian barley populations (Mona Schreiber)				
1030		70	Analysis of Ancient Dental Calculus Proteins from Northern European Viking Samples (Rosa Jersie-Christensen)	Annex	175	It's a dog's life! What can we tell from sequencing 1,000 ancient samples? (Anna Linderholm)				
1045		115	Unappreciated ecosystem diversity of oral microbiota detected in ancient Britain (Andrew Farrer)	An	4	Bringing it all together: ancient DNA provides biological foundation for hypothesized population replacement in the California Channel Islands.  (Christiana Scheib)				
1100		170	Industrialization-associated changes in oral microbiome ecology (Irina Velsko)		78	Ancient DNA analysis of Scandinavian medieval drinking horns and the horn of the last aurochs bull (Maiken Hemme Bro-Jørgensen)				
1115			Coffee	Bred	ak					
			Old Tiny Critters			Isotopes and Behaviour				
1145	a	97	Evolution history over millenia of sub-lineages of invasive Salmonella enterica (Mark Achtman)		143	Spatio-temporal mtDNA and isotope analyses of red deer (Cervus elaphus) in the Vosges: long-lasting coexistence of two "ecotypes" and low mtDNA diversity throughout millennia (José Granado)				
1200	Theatre	112	Metagenomic analysis of a permafrost-preserved woolly mammoth calf (Giada Ferrari)	X	156	Investigating dietary input across early iron age assemblages from Slovenia using stable isotopes (Hannah Koon)				
1215	Lecture Th	98	The 5,300-year-old Helicobacter pylori genome of the Iceman (Ben Krause-Kyora)	Annex	125	Seasonal reproductive patterns of buried sheep in the funeral Avellaner cave (Epicardial; Northeast Iberian Peninsula) by stable isotope sequences (\delta 180) in bioapatite tooth enamel: funerary and sheep herding implications (Sheila Garcia Reig)				
1230	Le	172	Ancient Mitogenomes Shed Light on Population Affinity and Mortuary Practices in Southern Caucasus (L. Papac)		134	Neolithic Assemblage (Sophy Charlton)				
1245		57	A demographic history of plague revealed through historical Y. pestis genomes (Maria Spyrou)		89	Reconstructing the migratory behaviours of extinct fish populations using stable isotope analyses (Eric Guiry)				
1300		62	B-Thalassemia cod39 mutation found in an individual from a Punic necropolis (VI century BC-II century AD) in Sardinia (Claudia Viganó)		37	Contextualizing the Tianyuan genome within present and ancient human genomic diversity (Melinda Yang)				
1315			Lunch							
			Ancien	t Hur	nans	5				
1415		158	The Hole Story: Ancient DNA stable isotone and radiocarbon analysis of human remains from the 'Mesolithic'							
1430		51	A stable story: insights in the development of a (post)medieval population in the east of the Netherlands (Eveline Altena)							
1445		47	Taxonomic and Tissue Specific Dietary Proteins in Potte	ry Res	idues	(Jessica Hendy)				
1500	<u>r</u>	144	The Neolithic Transition at the Edge of Europe (Eppie Jo							
1515	eatre	10	Pre-Neolithic mitogenomes suggest a single major dispe Europe (Cosimo Posth)							
1530	_ <b>L</b>	117	Tracing the origins of 19th century enslaved Africans fro			d of Saint Helena <b>(Marcela Sandoval Velasco)</b>				
1545 1630	ture	159	Coffee Break  Population continuity in the time of admixture: exploring the Neolithic transition from Anatolia to Central Europe (David Diez del Molino)							
1645	ec	147	Exploring the Migration of the World's first Farmers (Lucy van Dorp)							
1700		169	Testing continuity of ancient samples using SNP data (Jo							
1715		99	Reconstructing population history in East Asia (Chuanchao Wang)							
1730		105	Origins and genetic legacy of the first people in Remote			ontus Skoglund)				
1745		141								
			The state of the s							

Title	Presenter	Position
(127) Unspecific mapping when searching for a target organism in next-generation sequencing reads: The case-study of DNA extracts from medieval leprosy sufferers	Marion Bonazzi	1
(130) Insight into the origin and diversification of late marine hunter-gatherers groups from the Chilean Patagonia	Constanza de la Fuente	2
(131) The Skeleton Coast shipwreck: sourcing elephant ivory from a 16th century Portuguese trading vessel	Ashley Coutu	3
(132) Comprehensive biomolecular analysis of faunal remains from Vindija Cave, Croatia, combining ZooMS collagen fingerprint analysis, stable isotopes, and ancient DNA.	Cara Kubiak	4
(137) Combining bleach and mild pre-digestion improves ancient DNA recovery from bones	Sanne Boessenkool	5
(138) Investigating Viking Age trade of Atlantic cod using ancient DNA	Bastiaan Star	6
(139) Identification of human migrants in the archaeological record: testing the method of oxygen isotope analysis by a compilation of all relevant published data	Tamsin O''Connell	7
(140) Stable isotope analysis of parchment as an annual record of British agriculture and climate	Sean Doherty	8
(142) Reconstruction of HLA genotypes in ancient human samples	Marcel Nutsua	9
(148) Genetic Identification of Canid in High Altitude Palaeoindian Peruvian Site	Tatiana Feuerborn	10
(151) Tracing changes in early life history of individuals from a Migration period cemetery	Andrea Czermak	11
(152) Imaging-assisted tooth dentine microsampling for time-resolved isotope analysis	Andrea Czermak	12
(153) Paleoproteomics identifies peptides from paint binders from ancient polychrome architecture	Luise Ørsted Brandt	13
(154) Investigating breastfeeding/weaning practices and adult mobility patterns during the Western Zhou Dynasty (1122 – 771 BC) at Boyangcheng, Anhui Province, China	Benjamin Fuller	14
(160) Human Adaptation to Dietary Changes: Are we optimised to an ancient Palaeolithic diet?	Catherine Walker	15
(163) Ancient Invasive Species? The Origins of the Endemic Mammals of the California Channel Islands	Courtney Hofman	16
(164) Comparison of Five Different DNA Extraction Methods for Reconstructing Ancient Gut Microbiomes from Coprolites	Richard Hagan	17
(165) Integrated approaches to animal exploitation in the Central European Early Neolithic: a case study from Ludwinowo 7 (Kuyavia, Poland; 5250-5000 cal BC)	Mélanie Roffet-Salque	18
(166) Europeans, Polynesians and Chickens: An archaeological and genetics approach to the natural and cultural history of chickens in South America	Ophélie Lebrasseur	19
(167) An ancient DNA analysis of the extinct Caribbean primate Xenothrix mcgregori	Roseina Woods	20
(168) Searching for pathogens in a New World colonial epidemic burial.	Kirsten Bos	21
(173) Investigating vessel-usage in the Indus Civilisation using ceramic lipid analysis	Akshyeta Suryanarayan	22
(174) Phylogeography and British population history of the European wildcat Felis silvestris silvestris inferred from ancient DNA.	Melissa Marr	23
(179) Analysis of Ancient Dental Calculus Proteins from Northern European Viking Samples	Rosa Jersie- Christensen	24