



**PALEOPATHOLOGY ASSOCIATION  
PRELIMINARY SCIENTIFIC PROGRAM**

22nd European Meeting of the  
Paleopathology Association

Sheraton Hotel, Zagreb, Croatia

28<sup>th</sup> August – 1<sup>st</sup> September 2018



**INSTITUTE FOR  
ANTHROPOLOGICAL  
RESEARCH**



**22<sup>nd</sup> European Meeting of the Paleopathology Association, August 28<sup>th</sup>-September 1<sup>st</sup> 2018**  
**Sheraton Hotel, Zagreb, Croatia**  
**PRELIMINARY SCIENTIFIC PROGRAM**

**TUESDAY, 28/8**

- 14:00-17:30** Registration (Sheraton Hotel, lobby)  
**18:00-20:00** Opening ceremony, Croatian Academy of Sciences and Arts

**WEDNESDAY, 29/8**

- 8:00-17:00** Registration (Sheraton Hotel, lobby)
- 8:30-9:15** Key-note lecture, Grand Ballroom B  
**A history of paleopathological research in Croatia with emphasis on recent investigations dealing with the ways in which low intensity, endemic warfare affects health**  
 Mario ŠLAUS (Croatian Academy of Sciences and Arts)
- 9:15-9:45** Coffee break
- 9:45-11:15** Podium session I, Grand Ballroom B **Chair** Israel HERSHKOVITZ
- 9:45** **Bioarchaeological research on pulp calcifications**  
 Nicole NICKLISCH, Oliver SCHIERZ, Frieder ENZMANN, Susanne FRIEDERICH, Kurt W. ALT
- 10:00** **Multi-omics study of the Iceman - Insights into health, diet and disease evolution**  
 Albert ZINK, Thomas RATTEI, Rudolph GRIMM, Frank MAIXNER
- 10:15** **Searching for malaria in the archaeological record: Biomolecular approaches and issues of preservation**  
 Michelle GAMBLE, Alvie LOUFOUMA-MBOUAKA, Frank MAIXNER, Albert ZINK, Michaela BINDER
- 10:30** **'Stories from bones' - The potential of 3D scanning and biomechanical modelling in palaeopathology**  
 Sonia Ruth ZAKRZEWSKI, Stephanie EVELYN-WRIGHT, Martin BROWNE, Christopher J. WOODS, Mark Noel MAVROGORDATO, Katy E. RANKIN, Oliver J. STOCKS, Alexander S. DICKINSON
- 10:45** **Insights from molecular evidence of *Mycobacterium leprae* from 15th century Normandy, France**  
 Helen D. DONOGHUE, Lauren OVEREND, Mark SPIGELMAN, Joël BLONDIAUX, Cecile Chapelain DE SERÉVILLE-NIEL
- 11:00** **Towards an integrated analysis of osteoporosis: A new bioarchaeological approach in paleopathology**  
 Anne-Marijn VAN SPELDE, Anna KJELLSTRÖM, Hannes SCHROEDER, Kerstin LIDÉN
- 11:15-11:30** Break
- 11:30-13:00** Podium session II, Grand Ballroom B **Chair** Piers MITCHELL
- 11:30** **Investigating health and dietary patterns between inland and coastal 17th and 18th century populations from Finland**  
 Kati Hannele SALO, Dimitra Ermioni MICHAEL, Elissavet DOTSIKA

- 11:45 **Intrabone stable isotope variation in skeletons with pathological lesions** \*\*  
Ana CURTO, Patrick MAHONEY, Anne-France MAURER, Cristina BARROCAS-DIAS, Teresa FERNANDES, Geraldine FAHY
- 12:00 **Evidence for adaptation to malaria in a 2.58-million-year-old proximal *Australopithecus africanus* femur from Makapansgat, South Africa**  
Martin HAEUSLER, Sabine LANDIS, Bernhard ZIPFEL, Viktoria A. KRENN, Cinzia FORNAI
- 12:15 **Ancient parasites in the Mediterranean basin: Review and new data** \*\*  
Kévin ROCHE, Matthieu LE BAILLY, Isabelle JOUFFROY-BAPICOT, Olivier DUTOUR, Alain BOUET
- 12:30 **Gastrointestinal parasite markers as evidence for waste management**  
Céline MAICHER, Antoni PALOMO, Christian HARB, Matthieu LE BAILLY
- 12:45 **Analysis of the skeletons from the Muslim cemetery of Songo Mnara (Tanzania). Integrating osteological data with the study of malaria aDNA**  
Francesca Bianca Maria MIGLIACCIO, Katharine ROBSON-BROWN, Jeffrey FLEISCHER, Stephanie WYNNE-JONES

**13:00-14:30** Lunch break

**14:30-16:00** Podium session III, Grand Ballroom B Chair Jane BUIKSTRA

- 14:30 **Reconsidering paleoepidemiological investigations in paleo-oncology, with reference to medieval Poland** \*\*  
Thomas SIEK
- 14:45 **A bioarchaeological analysis of the Islamic cemetery of El Quez, Alberite de San Juan, Zaragoza, Spain**  
Tina JAKOB, Joe Wallace WALSER III
- 15:00 **The Battle of Wagram 1809 - Palaeopathological evidence of life and death during the Napoleonic Wars** \*\*  
Hannah GRABMAYER, Michaela BINDER
- 15:15 **Osteolytic metaphyseal lesions and a calcified cyst in a pre-farming (6700-6200 BP) skeletal assemblage from Northern Vietnam: Possible hydatids disease**  
Hallie Ruth BUCKLEY, Monica TROMP, Marc OXENHAM, Hiep Hoang TRINH, Kate DOMETT, Anna WILLIS
- 15:30 **Craniofacial dysplastic bone disease in paleopathological investigations**  
Julia GRESKY
- 15:45 **The mass grave in the Schottenstift, Vienna, Austria - Palaeopathological perspectives on a medieval mystery**  
Christina MUSALEK, Michaela BINDER, Karin WILTSCHKE-SCHROTTA, Elfriede Hannelore HUBER

**16:00-16:30** Coffee break

**16:30-18:00** Podium session IV, Grand Ballroom B Chair Petra RAJIĆ ŠIKANJIĆ

- 16:30 **Food preservation and human health: The case of the young Egyptian priest "Iret-hor-r-u"**  
Hila MAY
- 16:45 **Scurvy in 18th/19th century military contexts in Austria**  
Michaela BINDER, Hannah GRABMAYER, Leslie QUADE
- 17:00 **Sines on the route between Africa and the Americas: Skeletal and documental evidence**  
Ana Luisa SANTOS, Sónia SOARES, Sónia FERRO, Paula ALVES PEREIRA
- 17:15 **Periodontitis in the historical population of Radom (Poland) from the 11th to 19th centuries**  
Jacek TOMCZYK, Anna MYSZKA, Marta ZALEWSKA

\*\* Entrant for the Cockburn Student Prize

17:30 ***Hyperostosis frontalis interna* in ancient populations - A possible new way to the life-style reconstruction**

Tamás SZENICZEY, Antónia MARCSIK, Zsófia ÁCS, Timea BALASSA, Zsolt BERNERT, Katalin BAKÓ, Tamás CZUPPON, Anna ENDRŐDI, Sándor ÉVINGER, Zoltán FARKAS, Lucia HLAVENKOVÁ, Krisztina HOPPÁL, Csaba Kálmán KISS, Krisztián KISS, Kinga KOCSIS, Loránd Olivér KOVÁCS, Péter F. KOVÁCS, Kitti KÖHLER, László KÖLTŐ, Ivett KŐVÁRI, Orsolya LÁSZLÓ, Gabriella LOVÁSZ, Júlia LOVRANITS, József LUKÁCS, Zsófia MASEK, Mónika MERCZI, Erika MOLNÁR, Csilla Emese NÉMETH, János ÓDOR, László PAJA, Ildikó PAP, Róbert PATAY, István RÁCZ, Zsófia RÁCZ, Ágnes RITOÓK, Gergely SZENTHE, Gábor SZILAS, Béla Miklós SZŐKE, Zoltán TÓTH, Tivadar VIDA, Katalin WOLFF, Michael FINNEGAN, Tamás HAJDU

17:45 **Trepanation in Italy: A review of the literature and a new case**

Valentina GIUFFRA, Giulia RICCOMI, Gino FORNACIARI

**THURSDAY, 30/8**

**8:00-17:00** Registration (Sheraton Hotel, lobby)

**8:30-16:15** Poster session I, Grand Ballroom C

Authors in this session will be present during coffee breaks (9:15-9:45 and 15:45-16:15).  
Poster titles and authors listed, alphabetically, at the end of the program

**8:30-9:15** Key-note lecture, Grand Ballroom B

**Neandertal paleopathology: A tentative synthesis**

Fred H. SMITH, Maria O. SMITH (Illinois State University)

**9:15-9:45** Coffee break

**9:45-11:15** Podium session V, Grand Ballroom B **Chair** Nataša MILADINOVIĆ-RADMILOVIĆ

9:45 ***Cribrá femoralis*: Issues surrounding aetiology and standardised recording** \*\*

Jennifer AUSTEN, Mary E. LEWIS

10:00 **New insights on nutritional deficiencies at the *civitas* capital of *Aventicum* in Roman Switzerland (1st-3rd c. AD)**

Chryssi BOURBOU

10:15 **The time before lordosis: What immature vertebra can tell us about children in historical times?**

Ruth PELLEGG-KALLEVAG, Avni Leah HADAS, Samuel FRANCIS, Hila MAY

10:30 **Vitamin D deficiency and the antiquity of modern trends: Skeletal evidence from the Roman period site of Isola Sacra**

Laura LOCKAU, Stephanie ATKINSON, Simon MAYS, Tracy PROWSE, Michelle GEORGE, Luca BONDIOLI, Carolan WOOD, Marissa L. LEDGER, Megan BRICKLEY

10:45 **"Long-gone children" - Comparative paleopathological analysis of non-adult human remains from Avar (7th-8th c.) and Medieval Hungarian (12-14th c.) cemeteries**

Orsolya LÁSZLÓ, Tamás SZENICZEY

11:00 **Diaphysometaphyseal pathological deformations and extracortical porosity in infants from the Disalced Trinitarian Convent, Madrid (Spain)** \*\*

Álvaro Manuel MONGE CALLEJA, Berta MARTÍNEZ, Luis RÍOS, María Paz DE MIGUEL, Francisco ETXEBARRIA, Almudena GARCÍA-RUBIO, Ana Luisa SANTOS

**11:15-11:30** Break

\*\* Entrant for the Cockburn Student Prize

- 11:30-13:00** Podium session VI, Grand Ballroom B **Chair** Frank RÜHLI
- 11:30 **Stress markers in teeth - Signals of prehistoric lifestyles?**  
Kristina PENEZIĆ, Marko PORČIĆ, Jelena JOVANOVIĆ, Petra Kathrin URBAN, Ursula WITTEW-  
BACKOFEN, Sofija STEFANOVIĆ
- 11:45 **Palaeopathological and anthropological analysis of human cremated remains from the  
Golasecca Culture, Late Bronze Age/Early Iron Age, Italy**  
Omar LARENTIS, Marta LICATA, Ilaria GORINI, Chiara TESI
- 12:00 **The fruit of the loom. Paleopathological results about activities related to spinning and weaving  
in Roman time**  
Allesandro CANCI, Anita RADINI, Cecilia ROSSI
- 12:15 **The incidence of traumas in the socio-economic context of an Early Medieval Tuscan site and  
the hypothesis of gender violence**  
Serena VIVA
- 12:30 **Leprosy and pulmonary tuberculosis in medieval/modern Odense, Denmark:  
Palaeopathological analysis of rib lesions and inferences for the cross-immunity and co-  
infection hypotheses**  
Vitor MATOS, Carina MARQUES, Daniela PACHECO, Ana Luisa SANTOS
- 12:45 **The first complete description of acromegaly in Bologna in 1809: A journey through  
palaeoendocrinology**  
Francesco Maria GALASSI, Emanuele ARMOCIDA, Mirko TRAVERSARI, Luisa LEONARDI, Christian  
MANCINI, Nicolò Nicoli ALDINI, Roberta BALLESTRIERO, Maciej HENNEBERG, Frank RÜHLI,  
Alessandro RUGGERI
- 13:00-14:30** Lunch break
- 14:30-17:30** Symposium, Grand Ballroom A  
**The ecology of climate change and infectious diseases: A gateway between past and  
present**  
Moderators: Raffaella BIANUCCI, Dong Hoon SHIN
- 14:30 **Debunking the “human ectoparasite hypothesis”**  
Ole Jørgen BENEDICTOW, Raffaella BIANUCCI
- 14:45 **Parasitic Infection in a marshland climate: The Bronze Age pile dwelling settlement of Must  
Farm, UK (920-790 BC)** \*\*  
Marissa L. LEDGER, Elisabeth GRIMSHAW, Madi FAIREY, Rachel BALLANTYNE, Mark KNIGHT, Piers  
D. MITCHELL
- 15:00 **Parasites and climate in Medieval Iberia: Intestinal parasites in six Islamic period cesspits from  
Córdoba (Spain) and Mértola (Portugal)**  
Piers D. MITCHELL, Delaney KNORR, William SMITH, Marissa L. LEDGER, Leonor PEÑA-CHOCARRO,  
Jordà PÉREZ-GUILLEM, Rafael CLAPÉS, Maria de Fátima PALMA
- 15:15 **Changing landscapes of malaria in the Early Middle Ages**  
Timothy NEWFIELD (Skype talk)
- 15:30 **Socio-environmental changes and malaria Infection in Korea before 20th century**  
Dong Hoon SHIN, Min SEO, Jong Ha HONG, Eunju LEE
- 15:45-16:15** Coffee break

- 16:15 **Ancient *Mycobacterium leprae* genomes reveal an unexpected diversity of leprosy in medieval Europe**  
Verena SCHUENEMANN, Charlotte AVANZI, Ben KRAUSE-KYORA, Alexander SEITZ, Alexander HERBIG, Sarah INSKIP, Michael TAYLOR, Pushpendra SINGH, Jesper BOLDSSEN, Helen D. DONOGHUE, Sonia Ruth ZAKRZEWSKI, Andrej BENJAK, Kay NIESELT, Stewart COLE, Johannes KRAUSE
- 16:30 **Drought, political decline, and tuberculosis in Huari, Peru** \*\*  
Elizabeth A. NELSON, Aditya Kumar LANKAPALLI, Maria SPYROU, Åshild J. VÅGENE, Alexander HERBIG, Tiffany A. TUNG, Kirsten I. BOS
- 16:45 **Molecular detection of diseases from the European Little Ice Age in Mechelen, Belgium** \*\*  
Karen L. GIFFIN, Katrien VAN DE VIJVER, Ron HÜBLER, Felix M. KEY, Susanna SABIN, Alexander HERBIG, Kirsten I. BOS
- 17:00 **The influence of climate on tuberculosis evolution in the late Pleistocene/early Holocene**  
David MINNIKIN
- 17:15 **Disease dynamics in the Holocene Levant as reflected from the middle ear**  
Katarina FLOREANOVA, Hila MAY
- 17:30-17:45** Break
- 14:30-18:30** Symposium, Grand Ballroom B  
**Anthropology of violence - Soldiers, warriors and everyday life**  
Moderator: Fabio CAVALLI
- 14:30 **Anthropology of violence: An interdisciplinary framework**  
Fabio CAVALLI
- 14:45 **Slaughter of the Innocents and Martyrdom. Blood, pain and power in medieval Italian painting**  
Marco PIERINI
- 15:00 **A new collective violence site from Early Neolithic Central Europe: The mass grave of Halberstadt and its contextual interpretation**  
Christian MEYER, Corina KNIPPER, Nicole NICKLISCH, Angelina MÜNSTER, Olaf KÜRBISS, Veit DRESELY, Harald MELLER, Kurt W. ALT
- 15:15 **Cranial trauma from Mongolia: Conflict, crime and/or punishment**  
Judith Helen LITTLETON, Bruno FROHLICH, Tsend AMGALANTUGS, Paul MORROW
- 15:30 **The "Territorial Imperative": The origin of warfare in the southern Levant**  
Hila MAY, Omry BARZILAI
- 15:45-16:15** Coffee break
- 16:15 **New insights from trauma analysis of skeletal remains from the Benedictine monastery in Bijela, Croatia**  
Željka BEDIĆ, Andrej JANEŠ, Mario ŠLAUS
- 16:30 **Head wounds by firearm and sharp weapon at the S. Martino Battle (1859, Italy)**  
Simona MINOZZI, Valentina GHIROLDI, Gino FORNACIARI
- 16:45 **"To die but do not fall back". Anthropological study of skeletal remains of the First World War soldiers**  
Lisa DE LUCA, Dario INNOCENTI, Marialuisa CECERE, Tomaž FABEC, Fabio CAVALLI
- 17:00 **Going ballistic: Identifying sling shot injuries in prehistoric Europe**  
Linda FIBIGER

17:15 **Care and consequences of traumatic brain injury in Neolithic Sweden**  
Anna TORNBORG, Lars JACOBSSON

**17:30-17:45** Break

17:45 **Evidence for inter-personal conflict in Early Medieval Säben-Sabiona, Italy**  
Daniela TUMLER, Alice PALADIN, Albert ZINK

18:00 **The Count Guecello II of Prata, a Frederick II Hohenstaufen's lieutenant. Paleopathological findings in a medieval knight**

Ester BRUNETTI, Marialuisa CECERE, Dario INNOCENTI, Paola IACUMIN, Fabio CAVALLI

18:15 **Mortal gunshot wound in an early 19th century mummy from central Italy**  
Agata LUNARDINI, Lorenzo COSTANTINI

**19:15-20:00** Archaeological Museum, exhibition opening

### FRIDAY, 31/8

**8:00-12:00** Registration (Sheraton Hotel, lobby)

**8:30-16:30** Poster session II, Grand Ballroom C

Authors in this session will be present during coffee breaks (9:15-9:45 and 16:00-16:30).  
Poster titles and authors listed, alphabetically, at the end of the program

**8:30-9:15** Key-note lecture, Grand Ballroom B

**Molecular detection of ancient pathogens in the era of big data**

Kirsten I. BOS (Max Planck Institute for the Science of Human History)

**9:15-9:45** Coffee break

**9:45-11:15** Symposium, Grand Ballroom B

**Source combination in paleopathology. Paleopathography at the frontier between history and medicine**

Moderators: Francesco Maria GALASSI

9:45 **Introductory remarks**

Francesco Maria GALASSI

10:00 **On fevers and other foes of the humankind: An inventory of diseases that raged the city of Almada during the late 18th century**

Francisco CURATE, Anna TAVARES, António TELMO

10:15 **When and how were helminths eradicated in England?** \*\*

Hannah RYAN, Patrik FLAMMER, Adrian SMITH, Greger LARSON

10:30 **Incorporating medical records in paleopathology: Investigating respiratory disease in post-medieval London** \*\*

Cara Stella HIRST

10:45 **Combining paleopathography and paleopathology: The example of the Medici, grand Dukes of Florence**

Valentina GIUFFRA, Gino FORNACIARI

11:00 **The secret behind natural sopranos: Paleopathology of the castrato Gaspare Pacchierotti**

Alberto ZANATTA

\*\* Entrant for the Cockburn Student Prize

**11:15-11:30** Break

**11:30-13:00** Podium session VII, Grand Ballroom B **Chair** Ana Luisa SANTOS

11:30 **Physical burden and lower limb bone structure from the terminal Pleistocene to Holocene, Levant**

Victoria ROUL, Avni Leah HADAS, Samuel FRANCIS, Hila MAY

11:45 **Can femoral bone shape be trusted as an indicator for lifestyle?**

Avni Leah HADAS, Victoria ROUL, Ruth PELLEGG-KALLEVAG, Frank RÜHLI, Hila MAY

12:00 **Mediaeval and contemporary cervical spine - Paleopathological and clinical research**

Snježana SCHUSTER, Mario ŠLAUS, Matej MUSTAPIĆ

12:15 **Pathology of the cervical vertebrae**

Einat KEDAR, Hila MAY, Israel HERSHKOVITZ

12:30 **Prevalence of hypercementosis in Middle and Upper Paleolithic humans**

Sarah Ashlyn LACY

12:45 **A beautiful mind: Nikola Tesla (1856-1943)**

Antonio PERCIACCANTE, Philippe CHARLIER, Ludovico ABENAVOLI, Alessia CORALLI, Otto APPENZELLER, Raffaella BIANUCCI

**13:00-14:30** Lunch break

**14:30-16:00** Workshop, University Hospital Centre Zagreb

**Paleoradiology meets clinical radiology**

Hosts: Mislav ČAVKA, Frank RÜHLI

**14:30-16:00** Podium session VIII, Grand Ballroom B **Chair** Francesco Maria GALASSI

14:30 **Paleopathological investigation of human mummies from Gangi, Sicily**

Dario PIOMBINO-MASCALI, Mark VINER, Gerald CONLOGUE, Ronald BECKETT

14:45 **Macroscopical and radiological studies of 11 mummies of the XXI dynasty (1070-945 BC) found in the tomb of Hery (TT12); Luxor, Egypt**

Jesus HERRERIN

15:00 **I don't get this hole-thing - An attempt of statistical analysis to decipher the indication of surgical trepanations**

Kitty KIRÁLY, Gréta ELEKES, Mátyás BUKVA, Zoltán PINTÉR, Erika MOLNÁR, György PÁLFI, Zsolt BEREZKI

15:15 **Postmortem medical procedures in individuals from a Portuguese identified skull collection (1895-1902 AD): First evidence of possible teaching of modern dacryocystorhinostomy**

Rosa Cristina RAMOS, Ana Luisa SANTOS, Inês LEANDRO, Inês OLIVEIRA-SANTOS, Bruno Miguel MAGALHÃES

15:30 **The CAL Milano Cemetery Skeletal Collection: A modern and documented Italian identified skeletal collection**

Lucie BIEHLER-GOMEZ, Mirko MATTIA, Debora MAZZARELLI, Cristina CATTANEO

15:45 **CAL: An osteological timeline from the Roman Age to contemporary times**

Mirko MATTIA, Daniel GAUDIO, Barbara BERTOGLIO, Debora MAZZARELLI, Emanuela SGUAZZA, Lucie BIEHLER-GOMEZ, Pasquale POPPA, Anna Maria FEDELI, Cristina CATTANEO

**16:00-16:30** Coffee break

**16:30-17:30** Closing remarks, student awards, EPPA 2020 announcement

\*\* Entrant for the Cockburn Student Prize



**20:00-00:00** Gala dinner, restaurant Johann Franck

**SATURDAY, 1/9**

**9:00-16:00** Excursion to Trakošćan and Krapina (meet at Sheraton Hotel, lobby)

**Posters** (in alphabetical order of 1st author), Grand Ballroom C

Poster session I

1. **A case of tuberculosis of the hip joint in an adolescent of a modern (19th - 20th c.) Italian identified skeletal collection**  
Simona AFFINITO, Valentina MARIOTTI, Maria Giovanna BELCASTRO
2. **New insights of leprosy from South-Eastern France**  
Yann ARDAGNA, Avril MEFFRAY, Eloïse HOURIEZ, Anne RICHIER, Philippe BIAGINI
3. **Granuloma and teratoma in a probable potter from Ancient Nubia**  
Brenda J. BAKER
4. **Inflicted trauma among the Piceni population from Iron Age necropolis of Novilara (Italy - Pesaro 8th-7th c BC)**  
Michael Allen BECK DE LOTTO, Zita LAFFRANCHI, Chiara DELPINO
5. **Human skeletal remains for sale: A reassessment of ethical practices in the United States** \*\*  
Bobbie Maxine BENAVIDEZ, Sarah Ashlyn LACY
6. **Results of the Italian archaeological and anthropological researches in Sudan at Jebel Barkal (2016-2017)**  
Francesca BERTOLDI, Francesca IANNARILLI, Federica PANCIN, Martino GOTTARDO, Emanuele CIAMPINI, Mohamed ELTOUM
7. **Health status of a Late Antiquity human population from Piazza Corrubio-Verona, Italy**  
Francesca BERTOLDI, Valentina GIACOMETTI, Roberto CAMERIERE, Francesco PAGLIARA, Daniela COTTICA
8. **The Middle Age burials of Dogaletto di Mira (VE): Cases of contemporary deaths of women and children**  
Francesca BERTOLDI, Piera Allegra RASIA
9. **A histological approach to the identification of calcified soft tissue material in skeletal remains, procedures distinguishing atherosclerotic plaques and ossifying costal cartilage**  
Lucie BIEHLER-GOMEZ, Emanuela MADERNA, Cristina CATTANEO
10. **Non-adults burials from a Byzantine period cemetery in Trogir, Croatia**  
Michaela BINDER, Paul KLOSTERMANN, Lujana PARAMAN, Marina UGARKOVIĆ, Martin STESKAL
11. **Spinal ligamentous ossifications in a young adult of 13th century from the medieval site of Alghero Lo Quarter (Sassari, Sardinia, Italy)**  
Anna BINI, Pasquale BANDIERA, Marco MILANESE
12. **In silico screening methods in detection of ancient tuberculosis (aTB)**  
Paulina BORÓWKA, Łukasz PUŁASKI, Błażej MARCINIĄK, Beata BOROWSKA-STRUGIŃSKA, Elżbieta ŻĄDZIŃSKA, Jarosław DZIADEK, Wiesław LORKIEWICZ, Dominik STRAPAGIEL
13. ***Hyperostosis frontalis interna* in the British Royal Navy (1750-1815)**  
Ceridwen BOSTON
14. **Age estimation from bone mineral density: The influence of osteoporosis on estimates**  
Deona BOTHA, Niels LYNNERUP, Maryna STEYN

\*\* Entrant for the Cockburn Student Prize

15. **Three Bronze Age trepanations from Croatia**  
Mario CARIĆ, Dinko TRESIĆ PAVIČIĆ, Ilija MIKIĆ, Ivor JANKOVIĆ, Mislav ČAVKA, Mario NOVAK
16. **Skeletal developmental anomalies across the genealogically documented sample (Bohemia, 19th to 20th centuries)**  
Jan CVRČEK, Vítězslav KUŽELKA, Ondřej NAŇKA, Sylva KAUPOVÁ, Jaroslav BRŮŽEK, Petr VELEMÍNSKÝ
17. **Microbiological analysis of a child mummy from Zagreb Cathedral**  
Mislav ČAVKA, Andrea JANEŠ, Katarina DUJMOVIĆ, Jasenka ŠKRLIN
18. **Paleoradiological analysis of a child mummy from Zagreb Cathedral**  
Mislav ČAVKA, Mladen TOMORAD, Ivana ŠTIMAC, Ivor JANKOVIĆ, Mario NOVAK, Frank RÜHLI, Patrick EPPENBERGER
19. **Dental disease in aboriginal societies from the Dulce river basin in northwestern Argentina**  
Hilton DRUBE, Susana MARTÍNEZ, Elina SILVERA, Guillermo LAMENZA
20. **The case of hip dysplasia of the adult from the Late Antiquity site of Velebit (Serbia)**  
Ksenija ĐUKIĆ, Tamara PAVLOVIĆ, Petar MILENKOVIĆ, Đurđa BRACANOVIĆ, Marija ĐURIĆ
21. **Evidence of violence in burned human remains of the 3rd century AD found in the Roman villa of Els Munts (Tarragona, Spain)**  
Andrea FERNÁNDEZ-VILELA, Josep Anton REMOLÀ, Maria Eulàlia SUBIRÀ
22. **The syphilis of Maria Salviati (1499-1543), wife of Giovanni de' Medici named "of the Black Bands"**  
Antonio FORNACIARI, Raffaele GAETA, Simona MINOZZI, Luca VENTURA, Angelica VITIELLO, Gino FORNACIARI, Valentina GIUFFRÀ
23. **The femoral shaft: What do we do with all those cylinders?**  
Samuel FRANCIS, Ruth PELLEG-KALLEVAG, Avni Leah HADAS, Victoria ROUL, Hila MAY
24. **Prevalence of large-joint and extremities osteoarthritis in a Medieval (13th-16th) urban population from Leiria (Portugal)**  
Susana J. GARCIA
25. **Osteological evidence of disproportionate growth on a juvenile individual from the 13th century AD (Leiria, Portugal)**  
Susana J. GARCIA, Ana Luisa SANTOS
26. **Osteopetrosis and accompanied skeletal changes in a skeleton from Albania**  
Julia GRESKY, Emmanuele PETITI
27. **Possible case of leprosy and tuberculosis co-infection from the Sarmatian Period (2nd-5th AD)**  
Tamás HAJDU, Antónia MARCSIK, Lucia HLAVENKOVÁ, Ivett KÓVÁRI, Kinga KARLINGER, Zsuzsanna MÉSZÁROS KIS, Enikő SZVÁK, Antal SKLÁNITZ, Lénárd SZABÓ, Olivia CHERONET, Kendra SIRAK, Tamás SZENICZEY, Tadeusz KRASSOWSKI, Ron PINHASI
28. **DISH and diet: Stable light isotopic analysis across three South African skeletal populations**  
Rachel L.V. HOLGATE, Gabrielle C. KRUGER, Charlotte E.G. THEYE, Ericka N. L'ABBE, Maryna STEYN
29. **Dietary patterns and migration in pre-industrial Copenhagen**  
Marie Louise S. JØRKOV, Darren GRÖCKE, Janet MONTGOMERY
30. **Paleopathological pieces: Evaluating health from commingled Byzantine monastic skeletal remains at Mount Nebo, Jordan**  
Margaret JUDD
31. **Čerina-Josipovac cemetery - Bioarchaeological analysis of newly found cemetery next to Osijek, Eastern Croatia** \*\*  
Marijana JUKIĆ

- 32. A possible case of metastatic cancer from Kehida-Fövényes (7th-8th century A.D.)**  
Krisztián KISS, Tamás SZENICZEY, Kinga KARLINGER, Zsuzsanna MÉSZÁROS KIS, Enikő SZVÁK, Erika MOLNÁR, Antónia MARCSIK, Antal SKLÁNITZ, Lénárd SZABÓ, Zsolt DALLOS, Viktória KOVÁCS KIS, Krisztina BUCZKÓ, Tamás HAJDU
- 33. A study of non-specific stress indicators and metabolic disorders as a determinant of health and living conditions in subadult populations from North Poland (10th-19th c.)**  
Magdalena KRAJEWSKA
- 34. Small but healthy? A case study from prehistoric coastal Brazil**  
Luis Pezo LANFRANCO, Sabine EGGERS
- 35. A possible case of pituitary dwarfism from Thebes, Egypt**  
Orsolya LÁSZLÓ
- 36. MicroCT analysis of a rare case of Caffey's disease in a 6 months girl** \*\*  
Daniela LOMBARDO, Annalisa VETRO, Martina LARI, Alessandra MODI, David CAMELLI, Thomas COLARD
- 37. Health-related stress at an early urban centre: Timing and frequency of accentuated lines in human dental enamel in 3rd millennium BCE large trading and crafts centre in SE Iran**  
Kirsi O. LORENTZ, Simone LEMMERS, Wendy DIRKS, Donald REID, Patrick MAHONEY, Farzad FORUZANFAR, Mansoor SAJJADI
- 38. New bioarchaeological and paleopathological findings about the mummified subadult from Gruta del Indio site (San Rafael, Mendoza, Argentina)**  
Leandro Hernán LUNA, Claudia Marcela ARANDA, Pablo RODRÍGUEZ, Luis BALLARINI
- 39. Knee ankylosis in a female from the Lisbon Skeletal Collection**  
Giovanni MAGNO, Susana J. GARCIA
- 40. Recovery of skeletal remains from archaeological burial site: What is the rate of missing bones?**  
Mirko MATTIA, Emanuela MADERNA, Debora MAZZARELLI, Emanuela SGUAZZA, Cristina CATTANEO
- 41. Longer legs, fewer LEH, but shorter adult lives: A signature of immunologically naive migrants in London during the Industrial Revolution?** \*\*  
Gina Patricia MCFARLANE
- 42. Histopathology of the Great Hunger: Incorporating histological methods to examine the human biological response to famine and poverty in mid-19th century Ireland** \*\*  
Lauren A. MECKEL, Jonny GEBER, Hallie Ruth BUCKLEY
- 43. About a new case of leprosy from Amiens city (France), 10th-11th century: Paleopathological and paleomicrobiological approaches**  
Avril MEFFRAY, Eloïse HOURIEZ, Yann ARDAGNA, Carole FOSSURIER, Annick THUET, Philippe BIAGINI
- 44. Survival of a one-arm warrior in pre-antibiotic era: A case study from an Italian Longobard necropolis (6th-8th centuries AD)**  
Ileana MICARELLI, Robert R. PAINE, Caterina GIOSTRA, Mary Anne TAFURI, Antonio PROFICO, Marco BOGGIONI, Fabio DI VINCENZO, Andrea PAPINI, Danilo MASSANI, Giorgio MANZI

#### Poster session II

- 45. Osteomyelitis in a medieval burial from Smederevo Fortress, Serbia**  
Nataša MILADINOVIĆ-RADMILOVIĆ, Vesna BIKIĆ, Ksenija ĐUKIĆ, Petar MILENKOVIĆ, Dragana VULOVIĆ
- 46. Enamel hypoplasia and health condition through social status in the Roman Imperial Age**  
Simona MINOZZI, Walter Benedetto PANTANO, Carla CALDARINI, Valentina GIUFFRA, Paola CATALANO

47. **Metastatic prostate carcinoma from Imperial Rome (1st-2nd century A.D.)**  
Simona MINOZZI, Agata LUNARDINI, Carla CALDARINI, Davide CARAMELLA, Gino FORNACIARI, Paola CATALANO, Valentina GIUFFRA
48. **A case of systematic unilateral degenerative joint disease (UDJD) in 14th-17th century Transylvania, and its implications for the effect of mining on population health** \*\*  
Priscilla MOLLARD
49. **First results on the stable isotopic analysis of the individuals unearthed near the Leprosarium of Barcelona, Spain (12th-14th centuries)**  
Núria MONTES, Clara JÁUREGUI, Maria Eulàlia SUBIRÀ
50. **Four simultaneous sharp force injuries with signs of healing in a skull from the Middle Bronze Age site of Al-Addeiseh, Palestine**  
Lucia MUÑOZ UGARTE, Nataša ŠARKIĆ, Miriam SAQQA CARAZO
51. **Dental health and diet of the Iron Age North Pontic pastoralists**  
Irina NECHAYEV, Svetlana ANDRUKH, Robert JURMAIN
52. **An unusual bi-ritual burial of the Urnfield culture in Lower Austria**  
Friederike NOVOTNY, Ute Michaela SPANNAGL-STEINER, Alexandra C.J. VON MILLER
53. **Vitamin deficiency in Early Medieval sub-adults: Indications for metabolic disorders in the Eastern Italian Alps**  
Alice PALADIN, Daniela TUMLER, Albert ZINK
54. **Probable syphilis-tuberculosis coinfection in partially mummified human remains - Paleopathological study of an 18th century midwife's mummy**  
György PÁLFI, Ildikó SZIKOSSY, Orsolya VÁRADI, András SZEKERES, Kinga KARLINGER, Mark SPIGELMAN, Helen D. DONOGHUE, Frank MAIXNER, Albert ZINK, Olivier DUTOUR, Erika MOLNÁR, Ildikó PAP
55. **Extracting obstetrical histories from pelvic features**  
Doris PANY-KUCERA, Ute Michaela SPANNAGL-STEINER, Katharina REBAY-SALISBURY
56. **A tumour suppressor gene variant predisposing to colorectal cancer found in a mummy from the pre-industrialized era of Hungary**  
Ildikó PAP, Israel HERSHKOVITZ, Ella H. SKLAN, Gila Kahila BAR-GAL, Ildikó SZIKOSSY, Rina ROSIN-ARBESFELD, Michal FELDMAN
57. **Cone-beam computed tomography in paleodontology and bioarchaeology**  
Bojan PETROVIĆ, Kristina PENEZIĆ, Marko PORČIĆ, Jugoslav PENDIĆ, Sanja KOJIĆ, Jelena JOVANOVIĆ, Sofija STEFANOVIĆ
58. **Continuity or discontinuity of the life-style in Central Europe during the late antiquity and early Middle Ages transition: Health, diet, and biological adaptation**  
Janusz Andrzej PIONTEK
59. **Reconstruction of new ancient *Mycobacterium leprae* genomes from Europe**  
Saskia PFRENGLE, Judith NEUKAMM, Sarah INSKIP, Rezeda TUKHBATOVA, Nataliya BEREZINA, Alexandra BUZHILOVA, Stian SUPPERSBERGER HAMRE, Vitor MATOS, Maria Teresa FERREIRA, Ella REITER, Johannes KRAUSE, Verena SCHUENEMANN
60. **Urban disease in a rural environment: Evidence of pauper apprentices in Fewston, North Yorkshire**  
Leslie QUADE, Rebecca GOWLAND, Anwen CAFFELL, Andrew MILLARD, Malin HOLST, Geoff NOWELL, Darren GRÖCKE
61. **"Bring out your dead!": Differential strategies for dealing with the dead at medieval Thornton Abbey**  
Caterina RAFFONE, Katie HEMER, Hugh WILLMOTT

62. **Hydrocephalus in a child from Nuštar**  
Petra RAJIĆ ŠIKANJIĆ, Dejana NIKITOVIC, Anita RAPAN PAPEŠA
63. **Application of a new method for estimating age and identifying sex of medieval subadult populations from archaeological sites in northern Italy**  
Chiara ROSSETTI, Marta LICATA, Ilaria GORINI, Adelaide TOSI
64. **Growing up between wars and epidemics: Teeth alterations in an individual from the S. Francisco Convent of Coimbra (19th century, Portugal)**  
Ana Isabel RUFINO, Maria Teresa FERREIRA, Sofia WASTERLAIN
65. **Slaves' diet: Dental caries and wear in a sample of African individuals from Valle da Gafaria (15th - 17th centuries, Lagos - Portugal)**  
Ana Isabel RUFINO, Maria Teresa FERREIRA, Sofia WASTERLAIN
66. **A lung nodule as a rich source of host and pathogen DNA: Analysis of a 17th century *Mycobacterium tuberculosis* genome from Lund, Sweden**  
Susanna Jacey SABIN, Alexander HERBIG, Åshild J. VÅGENE, Torbjörn AHLSTRÖM, Gracijela BOZOVIĆ, Elizabeth A. NELSON, Caroline ARCINI, Kirsten I. BOS
67. **Biomechanic of foot with bipartite medial cuneiform in Mediterranean series**  
Eduardo SALDIAS, Assumpció MALGOSA, Albert ISIDRO
68. **Vertebral pathology and its possible role in the etiology of accelerated tooth wear in an Ancient Egyptian population**  
Damian Mark SCULLY
69. **Sexual selection and the human chin**  
Tatiana SELLA TUNIS, Hila MAY, Alexander D. VARDIMON, Israel HERSHKOVITZ, Rachel SARIG, Nir SHPACK
70. **Paleoanthropology of the inhabitants of the lands Ethuni and Eriakhi of the Pre-Urartian Period (Armenia)**  
Hasmik SIMONYAN, Ruzan MKRTCHYAN
71. **The challenges of biomolecular paleopathology**  
Václav SMRČKA
72. **Rare manifestations of spinal tuberculosis in the Robert J. Terry Anatomical Skeletal Collection (National Museum of Natural History, Smithsonian Institution, Washington, DC, USA)**  
Olga SPEKKER, David R. HUNT, Orsolya A. VÁRADI, William BERTHON, György PÁLFI, Erika MOLNÁR
73. **A one-eyed soldier from el-Detti, Sudan?**  
Magdalena T. SRIENC
74. **New possible case of spinal tuberculosis in an osteoarcheological sample from 6th-7th centuries (Avar Age) in Hungary (Transdanubia, Kölked Feketekapu „A”)**  
Tamás SZENICZEY, Kinga KARLINGER, Zsuzsanna MÉSZÁROS KIS, Enikő SZVÁK, Antal SKLÁNITZ, Lénárd SZABÓ, Krisztián KISS, István RÁ CZ, Tamás HAJDU, Antónia MARCSIK
75. **Traces of gout in the mummy of an 18th century TB infected woman, Vác, Hungary**  
Ildikó SZIKOSSY, Ildikó PAP, Zsolt BERE CZKI, Orsolya VÁRADI, András SZEKERES, Kinga KARLINGER, Mark SPIGELMAN, Helen D. DONOGHUE, Olivier DUTOUR, Frank MAIXNER, Albert ZINK, György PÁLFI
76. **Pathological alterations in human mummies of the Gamhud cemetery**  
Enikő SZVÁK, Antal SKLÁNITZ, Lénárd SZABÓ, Áron BÉNI, István JÁNOS, Márta DOBRÓNÉ TÓTH, Zita SZIKSZAY, Zsófia KERTÉ SZ, Mihály MOLNÁR, István MAJOR, Hedvig GYŐRY, Karola BIACSI, György PÁLFI, Erika MOLNÁR, Ildikó PAP, Tamás HAJDU, Tamás SZENICZEY, Edina BARANYAI, Virág PABESCHITZ, Ildikó SZIKOSSY

77. **The story of my misfortunes: A case study of individual with several severe conditions including syphilis, residual rickets and fractures (Spain, 16th-18th century)**  
Nataša ŠARKIĆ, Lucia MUÑOZ UGARTE, Goran ZEBIĆ, Rosa DINARÈS, Jesus HERRERÍN
78. **Paleoontological studies on skeletal remains of historical populations from Hungary**  
Krisztina TAKÁCS-VELLAI, Tamás HAJDU, Antónia MARCSIK, György PÁLFI, Tamás SZENICZEY, Endre NEPARÁCZKI, Tibor TÖRÖK, Erika MOLNÁR
79. **A probable case of rheumatoid arthritis from Medieval northern Italy (12th-13th centuries)**  
Chiara TESI, Valentina GIUFFRA, Gino FORNACIARI, Omar LARENTIS, Monica Rita MOTTO, Marta LICATA
80. **Differential subadult health status informed by odontometric, genetic, and cultural estimates for sex** \*\*  
Lindsey Jo Helms THORSON, Vlasta VYROUBAL, Željka BEDIĆ, Mario ŠLAUS, Patrick J. GRAY
81. **A comparative study of spinal disease in Ancient Nubia from the Meroitic to Medieval period**\*\*  
Samantha TIPPER, Charlotte ROBERTS, Penny WILSON
82. **Association between burial custom and pathology: A case study of treponemal infection to skeleton from 10th-11th century AD Rakhigarhi, India**  
Veena Nirmalendu TRIPATHY, Subhash WALIMBE, Tejas GARGE, Amendra NATH
83. **Linear cutting trepanation in Italy: A unique case from Hellenistic Sicily (3rd century BC)**  
Giorgia TULUMELLO, Giulia RICCOMI, Simona MINOZZI, Valentina GIUFFRA
84. **Markers of disease in juvenile remains from a Second Anglo Boer War concentration camp cemetery, South Africa**  
Stephany Yvonne VAN DER WALT, Willem Coenraad NIENABER, Anja MEYER, Maryna STEYN
85. **A unique case of multiple frontal sinus osteoma from Roman Sicily (Catania, 2nd-3rd century AD): Morphological, radiological and histological assessment**  
Elena VAROTTO, Rodolfo BRANCATO, Lorenzo MEMEO, Maria Teresa MAGRO
86. **Ötzi: new anthropological analysis using 3D visualizations from 2013 CT scans**  
Chiara VILLA, Kirstine BOYSEN, Mari BØKSET, Mathias SØDERLUND, Albert ZINK, Niels LYNNERUP
87. **A contribution to the history of medicine in 19th-century Croatia**  
Vlasta VYROUBAL, Danijel LONČAR, Marija MIHALJEVIĆ, Marina MATKOVIĆ VRBAN, Mario ŠLAUS
88. **Rhinomaxillary features of two probable cases of leprosy in a Joseon Period population of South Korea**  
Eun Jin WOO