

Under the high auspices of the  
Croatian Academy of Sciences and Arts

22nd

# European Meeting of the Paleopathology Association

Sheraton Hotel, Zagreb, Croatia

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

# CONFERENCE PROGRAMME



INSTITUTE FOR  
ANTHROPOLOGICAL  
RESEARCH



Paleopathology  
Association



SCIENTIFIC COUNCIL FOR  
ANTHROPOLOGICAL RESEARCH  
OF THE CROATIAN ACADEMY  
OF SCIENCES AND ARTS  
MDCCCLXII







# WELCOME ADDRESS

Dear colleagues and friends,

It is our great pleasure to welcome you to the 22nd European Meeting of the Paleopathology Association (PPA) in Zagreb. Since 1892 when the term 'paleopathology' was coined it evolved from a simple macroscopic approach based on recording and describing pathological changes on ancient bones and teeth to a multi- and inter-disciplinary study involving various state-of-the-art methods from different scientific fields.

We, as paleopathologists try to define and describe processes concerning the emergence and transmission of various diseases and other pathological changes as well as the occurrence of violence in past populations. Today, this is an important topic especially in the light of the recent global refugee crisis and the rise of the anti-vaccine movement resulting in emergence of the diseases that were thought to be eradicated a long time ago.

Therefore, the Zagreb meeting will provide participants from all parts of the world a unique opportunity to exchange ideas on various topics, discuss diverse perspectives and to learn about novel methods in paleopathological research.

On behalf of the Organizing & Scientific Committee we wish you a very warm welcome to Zagreb in 2018!

**Mario Novak**

President of the Organizing Committee

# CONFERENCE PROGRAMME

## MONDAY 27/8

- 9:00-13:45 Pre-conference event, 44<sup>th</sup> School of Biological Anthropology "Dr. Hubert Maver"; Croatian Academy of Sciences and Arts

## TUESDAY, 28/8

- 14:00-17:30 Registration; Sheraton Hotel, lobby  
18:00-20:00 Opening ceremony and welcome drink; Croatian Academy of Sciences and Arts

## WEDNESDAY, 29/8

- 8:00-17:00 Registration; Sheraton Hotel, lobby  
8:30-17:45 Key-note lecture, podium presentations; Sheraton Hotel

## THURSDAY, 30/8

- 8:00-17:00 Registration; Sheraton Hotel, lobby  
8:00-17:30 Poster presentations; Sheraton Hotel  
8:30-17:45 Key-note lecture, symposia, podium presentations; Sheraton Hotel  
19:00-20:00 Exhibition opening; Archaeological Museum





## FRIDAY, 31/8

- 8:00-11:30 Registration; Sheraton Hotel, lobby  
8:00-17:30 Poster presentations; Sheraton Hotel  
8:30-17:45 Key-note lecture, symposium, podium presentations; Sheraton Hotel  
14:30-16:00 Workshop "Paleoradiology meets clinical radiology";  
University Hospital Centre Zagreb  
16:30-17:30 Closing remarks, student awards, EPPA 2020 announcement; Sheraton Hotel  
20:00-00:00 Gala dinner; restaurant Johann Franck (optional)

## SATURDAY, 1/9

- 9:00-16:00 Excursion (optional)



## TUESDAY, 28/8

- 14:00-17:30 Registration (Sheraton Hotel, lobby)  
18:00-20:00 Opening ceremony and welcome drink, 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)
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- 9:15-9:45 **Coffee break**
- 9:45-11:15 Podium session I, Grand Ballroom B **Chair** Israel HERSHKOVITZ
- 9:45 **Probable syphilis-tuberculosis coinfection in partially mummified human remains - Paleopathological study of an 18<sup>th</sup> 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
- 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 15<sup>th</sup> 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

\*\* Entrant for the Cockburn Student Prize

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

<b>11:30-13:00</b>	<u>Podium session II</u> , Grand Ballroom B	<b>Chair</b> Piers MITCHELL
11:30	<b>Hyperostosis frontalis interna in ancient populations - A possible new way to the life-style reconstruction</b> Tamás SZENICZEY, Antónia MARCSIK, Zsófia ÁCS, Timea BALASSA, Zsolt BERNERT, Katalin BAKÓ, Tamás CZUPPON, Anna ENDRÓDI, Sándor ÉVINGER, Zoltán FARKAS, Lucia HAVENKOVÁ, Krisztina HOPPÁL, Csaba Kálmán KISS, Krisztián KISS, Kinga KOCSIS, Loránd Olivér KOVÁCS, Péter F. KOVÁCS, Kitti KÖHLER, László KÖLTŐ, Ivett KÖVÁRI, 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 SZÖKE, Zoltán TÓTH, Tivadar VIDA, Katalin WOLFF, Michael FINNEGANT, Tamás HAJDU	
11:45	<b>Intrabone stable isotope variation in skeletons with pathological lesions</b> Ana CURTO, Patrick MAHONEY, Anne-France MAURER, Cristina BARROCAS-DIAS, Teresa FERNANDES, Geraldine FAHY	**
12:00	<b>Evidence for adaptation to malaria in a 2.58-million-year-old proximal <i>Australopithecus africanus</i> femur from Makapansgat, South Africa</b> Martin HAEUSLER, Sabine LANDIS, Bernhard ZIPFEL, Viktoria A. KRENN, Cinzia FORNAI	
12:15	<b>Ancient parasites in the Mediterranean basin: Review and new data</b> Kévin ROCHE, Matthieu LE BAILLY, Isabelle JOUFFROY-BAPICOT, Olivier DUTOUR, Alain BOUET	**
12:30	<b>Gastrointestinal parasite markers as evidence for waste management</b> Céline MAICHER, Antoni PALOMO, Christian HARB, Matthieu LE BAILLY	
12:45	<b>Analysis of the skeletons from the Muslim cemetery of Songo Mnara (Tanzania). Integrating osteological data with the study of malaria aDNA</b> Francesca Bianca Maria MIGLIACCIO, Katharine ROBSON-BROWN, Jeffrey FLEISCHER, Stephanie WYNNE-JONES	

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

<b>14:30-16:00</b>	<u>Podium session III</u> , Grand Ballroom B	<b>Chair</b> Jane BUIKSTRA
14:30	<b>Reconsidering paleoepidemiological investigations in paleo-oncology, with reference to medieval Poland</b> Thomas SIEK	**
14:45	<b>A bioarchaeological analysis of the Islamic cemetery of El Quez, Alberite de San Juan, Zaragoza, Spain</b> Tina JAKOB, Joe Wallace WALSER III	

\*\* Entrant for the Cockburn Student Prize

15:00	<b>The Battle of Wagram 1809 - Palaeopathological evidence of life and death during the Napoleonic Wars</b>	**
	Hannah GRABMAYER, Michaela BINDER	
15:15	<b>Osteolytic metaphyseal lesions and a calcified cyst in a pre-farming (6700-6200 BP) skeletal assemblage from Northern Vietnam: Possible hydatids disease</b>	
	Hallie Ruth BUCKLEY, Monica TROMP, Marc OXENHAM, Hiep Hoang TRINH, Kate DOMETT, Anna WILLIS	
15:30	<b>Craniofacial dysplastic bone disease in paleopathological investigations</b>	
	Julia GRESKY	
15:45	<b>The mass grave in the Schottenstift, Vienna, Austria - Palaeopathological perspectives on a medieval mystery</b>	
	Christina MUSALEK, Michaela BINDER, Karin WILTSCHKE-SCHROTTA, Elfriede Hannelore HUBER	

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


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16:30-17:45	<b>Podium session IV, Grand Ballroom B</b>	Chair Petra RAJIĆ ŠIKANJIĆ
16:30	<b>Food preservation and human health: The case of the young Egyptian priest "Iret-hor-r-u"</b>	
	Hila MAY	
16:45	<b>Sines on the route between Africa and the Americas: Skeletal and documental evidence</b>	
	Ana Luisa SANTOS, Sónia SOARES, Sónia FERRO, Paula ALVES PEREIRA	
17:00	<b>Investigating health and dietary patterns between inland and coastal 17<sup>th</sup> and 18<sup>th</sup> century populations from Finland</b>	
	Kati Hannele SALO, Dimitra Ermioni MICHAEL, Elissavet DOTSINKA	
17:15	<b>Periodontitis in the historical population of Radom (Poland) from the 11<sup>th</sup> to 19<sup>th</sup> centuries</b>	
	Jacek TOMCZYK, Anna MYSZKA, Marta ZALEWSKA	
17:30	<b>Trepanation in Italy: A review of the literature and a new case</b>	
	Valentina GIUFFRA, Giulia RICCOMI, Gino FORNACIARI	

\*\* Entrant for the Cockburn Student Prize

## THURSDAY, 30/8

8:00-17:00	Registration (Sheraton Hotel, lobby)
8:00-17:30	<u>Poster session I</u> , Grand Ballroom C Authors in this session will be presenting during coffee breaks (9:15-9:45 and 15:45-16:15). Poster titles and authors are listed, alphabetically, at the end of the program
8:30-9:15	<u>Key-note lecture</u> , Grand Ballroom B <b>Neandertal paleopathology: A tentative synthesis</b> Fred H. SMITH, Maria O. SMITH (Illinois State University)
<b>9:15-9:45</b>	<b>Coffee break</b>
9:45-11:15	<u>Podium session V</u> , Grand Ballroom B
9:45	<b>Cribrum femoralis: Issues surrounding aetiology and standardised recording</b>
10:00	<b>New insights on nutritional deficiencies at the <i>civitas</i> capital of <i>Aventicum</i> in Roman Switzerland (1<sup>st</sup>-3<sup>rd</sup> c. AD)</b>
10:15	<b>The time before lordosis: What immature vertebra can tell us about children in historical times?</b>
10:30	<b>Vitamin D deficiency and the antiquity of modern trends: Skeletal evidence from the Roman period site of Isola Sacra</b>
10:45	<b>"Long-gone children" - Comparative paleopathological analysis of non-adult human remains from Avar (7<sup>th</sup>-8<sup>th</sup> c.) and Medieval Hungarian (12-14<sup>th</sup> c.) cemeteries</b>
11:00	<b>Diaphysometaphyseal pathological deformations and extracortical porosity in infants from the Discalced Trinitarian Convent, Madrid (Spain)</b>

\*\* Entrant for the Cockburn Student Prize

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

- 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 WITTWER-BACKOFEN, Sofija STEFANOVIĆ
- 11:45 **Traces of gout in the mummy of an 18<sup>th</sup> century TB infected woman, Vác, Hungary**  
Ildikó SZIKOSSY, Ildikó PAP, Zsolt BERECZKI, Orsolya VÁRADI, András SZEKERES, Kinga KARLINGER, Mark SPIGELMAN, Helen D. DONOGHUE, Olivier DUTOUR, Frank MAIXNER, Albert ZINK, György PÁLFI
- 12:00 **The fruit of the loom. Paleopathological results about activities related to spinning and weaving in Roman time**  
Alessandro CANCI, Anita RADINI, Cecilia ROSSI
- 12:15 **Prevalence of large-joint and extremities osteoarthritis in a Medieval (13<sup>th</sup>-16<sup>th</sup>) urban population from Leiria (Portugal)**  
Susana J. GARCIA
- 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

\*\* Entrant for the Cockburn Student Prize

15:00	<b>Parasites and climate in Medieval Iberia: Intestinal parasites in six Islamic period cesspits from Córdoba (Spain) and Mértola (Portugal)</b>	
	Piers D. MITCHELL, Delaney KNORR, William SMITH, Marissa L. LEDGER, Leonor PEÑA-CHOCARRO, Jordà PÉREZ-GUILLEM, Rafael CLAPÉS, Maria de Fátima PALMA	
15:15	<b>Molecular detection of diseases from the European Little Ice Age in Mechelen, Belgium</b>	**
	Karen L. GIFFIN, Katrien VAN DE VIJVER, Ron HÜBLER, Felix M. KEY, Susanna SABIN, Alexander HERBIG, Kirsten I. BOS	
15:30	<b>Socio-environmental changes and malaria Infection in Korea before 20<sup>th</sup> century</b>	
	Dong Hoon SHIN, Min SEO, Jong Ha HONG, Eunju LEE	

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**15:45-16:15 Coffee break**


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16:15	<b>Ancient <i>Mycobacterium leprae</i> genomes reveal an unexpected diversity of leprosy in medieval Europe</b>	
	Verena SCHUENEMANN, Charlotte AVANZI, Ben KRAUSE-KYORA, Alexander SEITZ, Alexander HERBIG, Sarah INSKIP, Michael TAYLOR, Pushpendra SINGH, Jesper BOLDSEN, Helen D. DONOGHUE, Sonia Ruth ZAKRZEWSKI, Andrej BENJAK, Kay NIESELT, Stewart COLE, Johannes KRAUSE	
16:30	<b>Drought, political decline, and tuberculosis in Huari, Peru</b>	**
	Elizabeth A. NELSON, Aditya Kumar LANKAPALLI, Maria SPYROU, Åshild J. VÅGENE, Alexander HERBIG, Tiffany A. TUNG, Kirsten I. BOS	
16:45	<b>The influence of climate on tuberculosis evolution in the late Pleistocene/early Holocene</b>	
	David MINNIKIN	
17:00	<b>Disease dynamics in the Holocene Levant as reflected from the middle ear</b>	
	Katarina FLOREANOVA, Hila MAY	
17:15	<b>Discussion</b>	
<b>14:30-18:00</b>	<b>Symposium, Grand Ballroom B</b>	
	<b>Anthropology of violence - Soldiers, warriors and everyday life</b>	
	Moderator: Fabio CAVALLI	
14:30	<b>Anthropology of violence: An interdisciplinary framework</b>	
	Fabio CAVALLI	
14:45	<b>Evidence for inter-personal conflict in Early Medieval Säben-Sabiona, Italy</b>	
	Daniela TUMLER, Alice PALADIN, Albert ZINK	

\*\* Entrant for the Cockburn Student Prize

15:00	<b>A new collective violence site from Early Neolithic Central Europe: The mass grave of Halberstadt and its contextual interpretation</b> Christian MEYER, Corina KNIPPER, Nicole NICKLISCH, Angelina MÜNSTER, Olaf KÜRBIS, Veit DRESELY, Harald MELLER, Kurt W. ALT
15:15	<b>Cranial trauma from Mongolia: Conflict, crime and/or punishment</b> Judith Helen LITTLETON, Bruno FROHLICH, Tsendl AMGALANTUGS, Paul MORROW
15:30	<b>The “Territorial Imperative”: The origin of warfare in the southern Levant</b> Hila MAY, Omry BARZILAI

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**15:45-16:15 Coffee break**

16:15	<b>New insights from trauma analysis of skeletal remains from the Benedictine monastery in Bijela, Croatia</b> Željka BEDIĆ, Andrej JANEŠ, Mario ŠLAUS
16:30	<b>Head wounds by firearm and sharp weapon at the S. Martino Battle (1859, Italy)</b> Simona MINOZZI, Valentina GHIROLDI, Gino FORNACIARI
16:45	<b>“To die but do not fall back”. Anthropological study of skeletal remains of the First World War soldiers</b> Lisa DE LUCA, Dario INNOCENTI, Marialuisa CECERE, Tomaž FABEC, Fabio CAVALLI
17:00	<b>Going ballistic: Identifying sling shot injuries in prehistoric Europe</b> Linda FIBIGER
17:15	<b>Care and consequences of traumatic brain injury in Neolithic Sweden</b> Anna TORNBERG, Lars JACOBSSON
17:30	<b>The Count Guecello II of Prata, a Frederick II Hohenstaufen’s lieutenant. Paleopathological findings in a medieval knight</b> Ester BRUNETTI, Marialuisa CECERE, Dario INNOCENTI, Paola IACUMIN, Fabio CAVALLI
17:45	<b>Discussion</b>
19:00-20:00	Archaeological Museum, opening of the exhibition “Back to the past - Copper Age in northern Croatia”

\*\* Entrant for the Cockburn Student Prize

- 8:00-11:30** Registration (Sheraton Hotel, lobby)
- 8:00-17:30** Poster session II, Grand Ballroom C  
Authors in this session will be presenting during coffee breaks (9:15-9:45 and 16:00-16:30). Poster titles and authors are 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)

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**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** **When and how were helminths eradicated in England?** \*\*  
Hannah RYAN, Patrik FLAMMER, Adrian SMITH, Greger LARSON
- 10:15** **Incorporating medical records in paleopathology: Investigating respiratory disease in post-medieval London** \*\*  
Cara Stella HIRST
- 10:30** **Combining paleopathography and paleopathology: The example of the Medici, grand Dukes of Florence**  
Valentina GIUFFRA, Gino FORNACIARI
- 10:45** **The secret behind natural sopranos: Paleopathology of the castrato Gaspare Pacchierotti**  
Alberto ZANATTA
- 11:00** **Discussion**

\*\* 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, Hadas Leah AVNI, Samuel FRANCIS, Hila MAY
- 11:45 **Can femoral bone shape be trusted as an indicator for lifestyle?**  
Hadas Leah AVNI, Victoria ROUL, Ruth PELLEG-KALLEVAG, Frank RÜHLI, Hila MAY
- 12:00 **Mediaeval and contemporary cervical spine - Paleopathological and clinical research**  
Snježana SCHUSTER, Mario ŠLAUS, Matej MUSTAPIĆ
- 12:15 **A lung nodule as a rich source of host and pathogen DNA: Analysis of a 17<sup>th</sup> century *Mycobacterium tuberculosis* genome from Lund, Sweden**  
Susanna Jacey SABIN, Alexander HERBIG, Åshild J. VÅGENE, Torbjörn AHLSTRÖM, Gracijela BOZOVIC, Elizabeth A. NELSON, Caroline ARCINI, Kirsten I. BOS
- 12:30 **Prevalence of hypercementosis in Middle and Upper Paleolithic humans**  
Sarah Ashlyn LACY
- 12:45 **Health-related stress at an early urban centre: Timing and frequency of accentuated lines in human dental enamel in 3<sup>rd</sup> millennium BCE large trading and crafts centre in SE Iran**  
Kirs O. LORENTZ, Simone LEMMERS, Wendy DIRKS, Donald REID, Patrick MAHONEY, Farzad FORUZANFAR, Mansoor SAJJADI

**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

\*\* Entrant for the Cockburn Student Prize

- 14:45 **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
- 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 BERECZKI
- 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 RAMOS GASPAR, 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
- 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)

\*\* Entrant for the Cockburn Student Prize

# POSTERS

(in alphabetical order of 1<sup>st</sup> author), Grand Ballroom C

## Poster session I

1. **A case of tuberculosis of the hip joint in an adolescent of a modern (19<sup>th</sup> - 20<sup>th</sup> 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, 8<sup>th</sup>-7<sup>th</sup> 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 Corrubbio-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 13<sup>th</sup> century from the medieval site of Alghero Lo Quarter (Sassari, Sardinia, Italy)**  
Anna BINI, Pasquale BANDIERA, Marco MILANESE

\*\* Entrant for the Cockburn Student Prize

- 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
- 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, 19<sup>th</sup> to 20<sup>th</sup> 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 3<sup>rd</sup> 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 GIUFFRA
- 23. The femoral shaft: What do we do with all those cylinders?**  
Samuel FRANCIS, Ruth PELLEG-KALLEVAG, Hadas Leah AVNI, Victoria ROUL, Hila MAY
- 24. Osteological evidence of disproportionate growth on a juvenile individual from the 13<sup>th</sup> century AD (Leiria, Portugal)**  
Susana J. GARCIA, Ana Luisa SANTOS
- 25. Osteopetrosis and accompanied skeletal changes in a skeleton from Albania**  
Julia GRESKY, Emmanuele PETITI

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- 26. Possible case of leprosy and tuberculosis co-infection from the Sarmatian Period (2<sup>nd</sup>-5<sup>th</sup> AD)**  
 Tamás HAJDU, Antónia MARCSIK, Lucia HAVENKOVÁ, Ivett KŐVÁRI, Kinga KARLINGER, Zsuzsanna MÉSZÁROS KIS, Enikő SZVÁK, Antal SKLÁNITZ, Lénárd SZABÓ, Olivia CHERONET, Kendra SIRAK, Tamás SZENICZEY, Tadeusz KRASSOWSKI, Ron PINHASI
- 27. 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
- 28. Paleopathological pieces: Evaluating health from commingled Byzantine monastic skeletal remains at Mount Nebo, Jordan**  
 Margaret JUDD
- 29. Čerina-Josipovac cemetery - Bioarchaeological analysis of newly found cemetery next to Osijek, Eastern Croatia**  
 Marijana JUKIĆ \*\*
- 30. A possible case of metastatic cancer from Kehida-Fövenyes (7<sup>th</sup>-8<sup>th</sup> 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
- 31. Small but healthy? A case study from prehistoric coastal Brazil**  
 Luis Pezo LANFRANCO, Sabine EGGLERS
- 32. A possible case of pituitary dwarfism from Thebes, Egypt**  
 Orsolya LÁSZLÓ
- 33. 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
- 34. Knee ankylosis in a female from the Lisbon Skeletal Collection**  
 Giovanni MAGNO, Susana J. GARCIA
- 35. 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
- 36. Longer legs, fewer LEH, but shorter adult lives: A signature of immunologically naive migrants in London during the Industrial Revolution? \*\***  
 Gina Patricia MCFARLANE
- 37. Histopathology of the Great Hunger: Incorporating histological methods to examine the human biological response to famine and poverty in mid-19<sup>th</sup> century Ireland \*\***  
 Lauren A. MECKEL, Jonny GEBER, Hallie Ruth BUCKLEY

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## Poster session II

- 38. About a new case of leprosy from Amiens city (France), 10<sup>th</sup>-11<sup>th</sup> century: Paleopathological and paleomicrobiological approaches**  
Avril MEFFRAY, Eloïse HOURIEZ, Yann ARDAGNA, Carole FOSSURIER, Annick THUET, Philippe BIAGINI
- 39. Survival of a one-arm warrior in pre-antibiotic era: A case study from an Italian Longobard necropolis (6<sup>th</sup>-8<sup>th</sup> centuries AD)**  
Ileana MICARELLI, Robert R. PAIN, Caterina GIOSTRA, Mary Anne TAFURI, Antonio PROFICO, Marco BOGGIONI, Fabio DI VINCENZO, Andrea PAPINI, Danilo MASSANI, Giorgio MANZI
- 40. Osteomyelitis in a medieval burial from Smederevo Fortress, Serbia**  
Nataša MILADINOVIĆ-RADMILOVIĆ, Vesna BIKIĆ, Ksenija ĐUKIĆ, Petar MILENKOVIC, Dragana VULOVIĆ
- 41. Enamel hypoplasia and health condition through social status in the Roman Imperial Age**  
Simona MINOZZI, Walter Benedetto PANTANO, Carla CALDARINI, Valentina GIUFFRA, Paola CATALANO
- 42. 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
- 43. A case of systematic unilateral degenerative joint disease (UDJD) in 14<sup>th</sup>-17<sup>th</sup> century Transylvania, and its implications for the effect of mining on population health** \*\*  
Priscilla MOLLARD

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- 44. First results on the stable isotopic analysis of the individuals unearthed near the Leprosarium of Barcelona, Spain (12<sup>th</sup>-14<sup>th</sup> centuries)**  
Núria MONTES, Clara JÁUREGUI, Maria Eulàlia SUBIRÀ
- 45. 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
- 46. Dental health and diet of the Iron Age North Pontic pastoralists**  
Irina NECHAYEV, Svetlana ANDRUKH, Robert JURMAIN
- 47. An unusual bi-ritual burial of the Urnfield culture in Lower Austria**  
Friederike NOVOTNY, Ute Michaela SPANNAGL-STEINER, Alexandra C.J. VON MILLER
- 48. Vitamin deficiency in Early Medieval sub-adults: Indications for metabolic disorders in the Eastern Italian Alps**  
Alice PALADIN, Daniela TUMLER, Albert ZINK
- 49. Extracting obstetrical histories from pelvic features**  
Doris PANY-KUCERA, Ute Michaela SPANNAGL-STEINER, Katharina REBAY-SALISBURY
- 50. 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

- 51. Cone-beam computed tomography in paleodontology and bioarchaeology**  
Bojan PETROVIĆ, Kristina PENEZIĆ, Marko PORČIĆ, Jugoslav PENDIĆ, Sanja KOJIĆ, Jelena JOVANOVIĆ, Sofija STEFANOVIĆ
- 52. 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
- 53. 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
- 54. "Bring out your dead!": Differential strategies for dealing with the dead at medieval Thornton Abbey**  
Caterina RAFFONE, Katie HEMER, Hugh WILLMOTT
- 55. Hydrocephalus in a child from Nuštar**  
Petra RAJIĆ ŠIKANJIĆ, Dejana NIKITOVIĆ, Anita RAPAN PAPEŠA
- 56. Growing up between wars and epidemics: Teeth alterations in an individual from the S. Francisco Convent of Coimbra (19<sup>th</sup> century, Portugal)**  
Ana Isabel RUFINO, Maria Teresa FERREIRA, Sofia WASTERLAIN
- 57. Slaves' diet: Dental caries and wear in a sample of African individuals from Valle da Gafaria (15<sup>th</sup> - 17<sup>th</sup> centuries, Lagos - Portugal)**  
Ana Isabel RUFINO, Maria Teresa FERREIRA, Sofia WASTERLAIN
- 58. Biomechanic of foot with bipartite medial cuneiform in Mediterranean series**  
Eduardo SALDIAS, Assumpció MALGOSA, Albert ISIDRO
- 59. The challenges of biomolecular paleopathology**  
Václav SMRČKA
- 60. 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
- 61. A one-eyed soldier from el-Detti, Sudan?**  
Magdalena T. SRIENC
- 62. New possible case of spinal tuberculosis in an osteoarcheological sample from 6<sup>th</sup>-7<sup>th</sup> centuries (Avar Age) in Hungary (Transdanubia, Kőlked Feketekapu „A”)**  
Tamás SZENICZEY, Kinga KARLINGER, Zsuzsanna MÉSZÁROS KIS, Enikő SZVÁK, Antal SKLÁNITZ, Lénárd SZABÓ, Krisztián KISS, István RÁCZ, Tamás HAJDU, Antónia MARCSIK
- 63. 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 KERTÉSZ, Mihály MOLNÁR, István MAJOR, Hedvig GYÖRY, Karola BIACSI, György PÁLFI, Erika MOLNÁR, Ildikó PAP, Tamás HAJDU, Tamás SZENICZEY, Edina BARANYAI, Virág PABESCHITZ, Ildikó SZIKOSSY

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- 64. The story of my misfortunes: A case study of individual with several severe conditions including syphilis, residual rickets and fractures (Spain, 16<sup>th</sup>-18<sup>th</sup> century)**  
Nataša ŠARKIĆ, Lucia MUÑOZ UGARTE, Goran ZEBIĆ, Rosa DINARÈS, Jesus HERRERÍN
- 65. A probable case of rheumatoid arthritis from Medieval northern Italy (12<sup>th</sup>-13<sup>th</sup> centuries)**  
Chiara TESI, Valentina GIUFFRA, Gino FORNACIARI, Omar LARENTIS, Monica Rita MOTTO, Marta LICATA
- 66. Differential subadult health status informed by odontometric, genetic, and cultural estimates for sex** \*\*  
Lindsey Jo Helms THORSON, Vlasta VYROUBAL, Željka BEDIĆ, Mario ŠLAUS, Mario NOVAK, Patrick J. GRAY
- 67. Linear cutting trepanation in Italy: A unique case from Hellenistic Sicily (3<sup>rd</sup> century BC)**  
Giorgia TULUMELLO, Giulia RICCOMI, Simona MINOZZI, Valentina GIUFFRA
- 68. 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
- 69. A unique case of multiple frontal sinus osteoma from late Roman Sicily (Catania, 5<sup>th</sup>-6<sup>th</sup> century AD): Morphological, radiological and histological assessment**  
Elena VAROTTO, Rodolfo BRANCATO, Lorenzo MEMEO, Maria Teresa MAGRO
- 70. Ötzi: new anthropological analysis using 3D visualizations from 2013 CT scans**  
Chiara VILLA, Kirstine BOYSEN, Mari BØKSET, Mathias SØDERLUND, Albert ZINK, Niels LYNNERUP
- 71. A contribution to the history of medicine in 19<sup>th</sup>-century Croatia**  
Vlasta VYROUBAL, Danijel LONČAR, Marija MIHALJEVIĆ, Marina MATKOVIĆ VRBAN, Mario ŠLAUS
- 72. Rhinomaxillary features of two probable cases of leprosy in a Joseon Period population of South Korea**  
Eun Jin WOO
- 73. The Vienna Pathological Anatomical Collection - a paradise for palaeopathologists**  
Karin WILTSCHKE-SCHROTTA, Eduard WINTER, Verena HOFECKER, Anatol PATZAK, Andreas WASSERSCHEID, Walter FEIGL
- 74. Health status of soldiers in the Lika Regiment of the Croatian Military Frontier between 1788 and 1850**  
Matea ZAJC PETRANOVIĆ, Alexander BUCZYNSKI, Petra RAJIĆ ŠIKANJIĆ, Vedran KLAUŽER, Juraj BALIĆ, Goran OVČARIČEK

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# MAP

- 1** Croatian Academy of Sciences and Arts, Trg Nikole Šubića Zrinskog 11  
44<sup>th</sup> School of Biological Anthropology, 27/8; PPA opening ceremony, 28/8
- 2** Hotel Sheraton, Ulica kneza Borne 2  
Conference venue; PPA conference scientific program, 29/8-31/8
- 3** Hotel Jadran, Vlaška ulica 50
- 4** Archaeological Museum, Trg Nikole Šubića Zrinskog 19  
Exhibition opening, 30/8
- 5** Restaurant Johann Franck, Trg bana Josipa Jelačića 9  
Conference dinner, 31/8



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



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