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Letter from the Editor

Dear PPA Members,

A new season has arrived, and with it a new Newsletter to keep you informed about what our members have been up to over the past three summer months.

Reports on Field Schools, Summer Workshops, and new research take you from China to Panama, from Egypt to Switzerland and Italy (pp. 11); a historical note introduces you to the story of Pales' contributions to the discovery of HIV (pp. 19), and personal reflections by a colleague on a palaeopathologyfilled sabbatical can be found on pp. 26.

If you would like to explore new literature and web-links in the world of Palaeopathology, have a look at pages 31 onwards; and if you are already thinking of how to best spend time in 2018, peruse the '*Future*

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Meetings' section to see which destinations with exciting Meeting programmes make it onto your travel map for the coming months.

Finally, it is with great sadness that we had to learn in the morning of September 1st that our dear colleague and friend Pia Bennike had passed away. While you can find her obituary on pp. 29, I am sure that I am not alone in remembering her dedication to the discipline, her warm smile, and her passion for life which she held up high until the very end. She will be missed.

Nivien Speith, PPA Newsletter Editor





A Compendium of Bioarchaeological Advances in Panama

by Nicole Smith-Guzmán (Smithsonian Tropical Research Institute, Panama)

Interdisciplinary approaches have resulted in a rapid advance in understanding of the origins, antiquity, and cultural evolution of the Precolumbian Native Americans of the Isthmo-Colombian area and their complex environmental interactions. Unfortunately, the informed bioarchaeological analysis of the human remains recovered from archaeological sites is an element of this growing body of research that has lagged behind the other disciplines. There are many reasons for this, chief among them the well-known phenomenon of poor preservation of osseous remains in the predominantly acidic tropical soils.

Despite the environmental constraints, many archaeological contexts, particularly those overlain by shell-bearing strata typical of coastal settlements, contain human skeletal remains in excellent condition. Published bioarchaeological studies of these human remains have remained sparse, typically reporting on singular aspects at one to two sites with no broad regional comparisons (Irish and Turner, 1987; Martín et al., 2009; Rojas-Sepúlveda et al., 2011; Smith-Guzmán et al., 2017; Stewart, 1958). Since 2016, a project funded by the Smithsonian Tropical Research Institute has sought to ameliorate the stalled bioarchaeological role in Isthmo-Columbian archaeology through the analysis of hundreds of backlogged human remains recovered from archaeological excavations since the mid-twentieth century.

To date, nearly 400 individuals from six diverse sites in Panama have been analyzed and their long-term storage retrofitted for improved preservation and access for future researchers. The osteological data is being collected using the Smithsonian Institution's Osteoware program, and all resulting materials will be uploaded to an online repository to be made public once completed. Preliminary results have enhanced previous understandings of the cultural activities and wellbeing of the pre-contact populations that inhabited the region. Furthermore, many previous interpretations based on grave goods alone are being revised in light of informed skeletal evidence of demography and disease.

Despite previous claims of high frequencies of sacrificial victims accompanying highstatus individuals in burial contexts (c.f. Lothrop 1954), cut marks on the bones and peri-mortem trauma are rare to non-existent, and most individuals were buried in the expected primary extended or flexed positions, or secondary bundle or urn burials. Re-use of burial contexts and post-mortem manipulation of human bone and teeth are common, following trends noted in other Central and South American groups.

Regarding pathologies and anomalies, many individuals from archaeological sites in Panama showed evidence of treponemal infection and developmental anomalies, including one individual with extreme abnormal bending and osteoporosis suggestive of osteogenesis imperfecta. Cultural modifications of the remains were also high, including obelionic artificial cranial modification and lingual surface attrition of the maxillary anterior teeth (as noted by Stewart (1958) and Irish and Turner (1987), respectively). A small number of individuals were found to have external auditory exostoses, which may seem surprising considering the stable, year-round warm temperatures in the region, but likely represents the individuals tasked with diving for shells used in ornamentation.

New interpretations based on the analysis of the human skeletal remains from sites in Panama can be summarized as follows. The lack of perimortem trauma on the bones and the normal demographical distribution as expected for pre-industrial patterns of life expectancy stand in contrast to previous assumptions of sacrificial or violent death for most individuals. Personal adornments of metal and shell tended to be associated with the remains of children rather than adults (following assertions by Briggs (1989)), including a 6-7-year-old child buried with a copper nose ring comprising one of the earliest known examples of metal working in the region (240-420 CE). High rates of dental caries, abscesses, and malocclusion follow previous suggestions of high dietary maize content. The skeletal and dental evidence of an infectious disease consistent with syphilis adds weight to the Columbian hypothesis of the disease's origin. Finally, biocultural markers that show high rates of head shaping and use of teeth as tools are evenly distributed between the sexes. In contrast, aquatic activities causing external auditory exostoses are restricted to a small sample of men only, suggesting that diving for precious shells was a male-dominated activity. Articles detailing these finds are in progress, and future directions will include the biochemical and genetic analysis of dental and calculus tissue from a select group of individuals.

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Figure 1. Nicole Smith-Guzmán laying out fetal remains recovered from Cerro Juan Díaz, Operation 1B.

Figure 2. Research assistant Leslie Naranjo removing bones from the matrix of a 2007 block-cut burial at Panama Viejo.

