

An Osteological Museum inside the Varese Medical School? A proposal from the Medical, Anthropological and Paleopathological point of view

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Dear Editor,

During the years, an amazing collection of archaeological bone materials came to life inside the rooms of the Physical Anthropology Laboratory of Varese Medical School. This impressive gathering will grow in the next years, as Varese is a very fertile soil from the archeological point of view. It is not unusual that ancient skeletal findings are discovered in this region, especially while churches or buildings are under renovation. Most of the times the discovery of ancient finds is not intentional but happens by chance. Varese is a very important archeological area from the funerary point of view, in fact a great many funerary structures were found here. For this reason, the Lombardy Archaeological Heritage Department has planned to support a paleobiological study about the local ancient population. In 1998, many of the skeletons found in the archeological sites were transferred to the laboratories of the Varese University. They were then analyzed under the anthropological and paleopathological profile (1). Few years later, about hundred skeletons filled the rooms of our laboratories. Therefore, we started to take into consideration the transformation of this informal collection into a Didactic Osteological Museum. The museum would be a place of study and research, and not just an archeological collection. The academic departments of Medicine, Biology, Anthropology and Archaeology would be the institutions more involved in this didactical project. The museum would be a great teaching and learning tool. Findings would be

showcased as a vehicle to promote academic research. Students would be encouraged to closely analyze them. We believe that an osteological museum with a didactic orientation should include two different sections: an anthropological exhibition and a paleopathological area. The anthropological section will be designed as a space for those who wish to specialize in the field of Physical-Forensic Anthropology. It would include all skeletal remains that are considered essential for the identification analysis (sex determination, age of death estimation, height estimation etc. ...) (2). Skulls and pelvis would be displayed in order to clearly show the dimorphic traits. Another sector would be focused on bone portions useful to study the phases of the bone growth, such as dental arches and long bones in children, and the phases of the skeleton senescence, such as ilium auricular surface, pubic symphysis, sternal rib end, in adults. It would be very helpful to display the parts of the appendicular skeleton, as these findings are important to gather information about the statures of several population groups. The phenotypic diversity of skulls collected inside the Varese Medical School is impressive. It would be extremely interesting for the researchers and for the students to have access to this collection to investigate the craniofacial morphological changes in ancient and modern Lombardy populations. It would include skulls that belong to the three different morphologies: brachycephalic, mesaticephalic, dolichocephalic. We envision a museum with an innovative, scientific structure that leads the students to better study the antique demographic dimensions

and the diseases that afflicted ancient peoples. Another area of Museum, the Pathological Section, should gather osteological portions that preserve pathological traces. Among these, trauma, metabolic diseases, degenerative diseases, especially arthrosis, dental diseases are the most represented diseases in our osteoarchaeological collection. In particular, the traumatology section includes a great variety of skeletons with fractured skull. In this regard, the skeletons recovered from the ancient necropolis of Caravate (8-9th centuries) show several types of skull traumatic lesions. A skeleton belonged to an adult woman presents a small quadrangular perforation on the right front of the skull, probably caused by an arrow. Two skeletons of adult male show blunt fractures on the parietal bone (3). Another medieval skeleton discovered in an ancient church of Varese (St. Pietro e Paolo church, 11-13th century) in 2001, is very valuable from the traumatological point of view (4). His skull has a deep cut (about 2,4 centimeter long), completely healed. Also two of his lumbar vertebrae are joined together in a "bone bridge", which is the consequence of a fall. In our collection, there are also cases of violent death, such as the skeleton of a young man, discovered in the San Biagio necropolis (10-12th century) in 2009, who was decapitated. Today again, it is not clear if he was killed during a fight or executed.

The first step to organize the museum is the identification of all the selected skeletons and bone remains. Then it is essential to archive properly the archeological and anthropological documents, as they contain the results of studies, researches, and evaluations. Thanks to an accurate filing of all the data, the students and the researchers will have a fast and easy access to the information kept inside the museum. We also envision a museum laboratory, where the students can take part in anthropological and archeological workshops. Certainly, not all the pieces stored inside the Varese Medical School are museum material. The findings that won't be selected might be reburied, as it happened with the medieval skeleton recovered in-

side the St. Martino church of Ispra (Varese) and then reburied in the modern municipal cemetery. On the other hand, some remains won't be include in the museum collection as they are still being studied (5, 6). Finally, it would be immensely helpful if the museum would be connected to other local museums and institutions, creating a scientific network that would boost and facilitate the academic research.

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Received: 8 November 2016

Accepted: 11 February 2017

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