



ISDM-IAPO-2017

October 4th - 7th, 2017
University of Bordeaux

Call for abstracts

ISDM-IAPO is an interdisciplinary symposium, bringing together researchers in anatomy, palaeoanthropology, palaeontology, archaeology, dentistry, genetics, biology and biomechanics, focussing on various themes: dental evolutionary changes, teeth in archaeology, dental growth and development, biomechanical aspects of the masticatory apparatus, odontology, pathology and oral health in present and past populations, evo-devo of hard tissues and new methods in dental anthropology.

The 17th International Symposium on Dental Morphology (ISDM) and 2nd congress of the International Association for Paleodontology ([IAPO](#)) will take place in Bordeaux, France, from 4th to 7th October, 2017. It will be hosted by [PACEA](#) (Unité Mixte de Recherche 5199) at the University of Bordeaux, at the [domaine du Haut-Carré](#) in Talence. The first International Symposium on Dental Morphology was held in Fredensborg, Denmark in 1965 and grew from an idea of Drs. A.A. Dahlberg, P.O. Pedersen and V. Alexandersen. This meeting takes place every three years and PACEA is delighted to host the symposium in 2017, after very successful meetings in Greifswald (2008), Newcastle upon Tyne (2011) and Zagreb (2014).

President of Scientific Board: M. Christopher DEAN

President of Organizing Board: Priscilla BAYLE

The scientific programme will be organized around eight sessions: Dental evolution in deep time, Teeth and archaeology (humans & animals), Dental growth and development, Dental function and biomechanics, Odontology and Paleodontology, Tooth evo-devo, Genetics and epigenetics as well as New methods in dental studies. The final day will be dedicated to an excursion to the *Vallée de l'Homme* in Dordogne.

Abstract Submissions: Deadline April 15th, 2017

All information, submissions and registrations on the website:

<http://isdm-iapo-2017.sciencesconf.org>

Contact: isdm-iapo-2017@u-bordeaux.fr

Sessions:

1. Dental evolution in deep time

We aim to provide a space to present research on dental evolutionary changes in vertebrates (including humans) at the geological scale. This includes morphological approaches and palaeoenvironmental reconstructions.

2. Teeth and archaeology (humans & animals)

This session focusses on how teeth can provide information on the biological and cultural diversity in past human populations from different chronological and geographical contexts. We seek contributions focussing on a wide range of anthropological and archaeological questions: biological affinities, microevolutionary changes, subsistence behaviour, diet diversity, mobility patterns, cultural geography, etc.

3. Dental growth and development

This session brings together researchers who work on dental growth and development at macro- and microstructural levels, focussing on how teeth are replaced and how dentitions become established, emphasizing life-history reconstructions.

4. Dental function and biomechanics

We will explore how the masticatory apparatus responds as a structure to biomechanical constraints. This includes soft (e.g. muscle, periodontal ligament) and hard tissue (bones, teeth and their constitutive tissues) anatomy at the macro- and microscopic level, as well as functional analyses and studies on the covariation between teeth and skull shape.

5. Odontology and Paleodontology

Approaches on how micro- and macrostructure of teeth and tooth tissues in past or present samples can inform physiology, pathology in biological, archaeological, palaeontological, and palaeoanthropological research is included in this session.

6. Tooth evo-devo

This session focusses on comparative developmental analyses of odontogenesis in vertebrates. It is designed to explore the developmental processes leading to tooth diversity in extant and extinct species at a cellular, tissue, or organ level, and involving the evolution of tooth mineralization, tooth shape or jaw patterning. In particular, we invite contributions from those interested in presenting descriptive or genetic studies on the developmental link between dental and bone (or other mineralized) tissues and on their possible covariation within a species and during evolution.

7. Genetics and epigenetics

This session includes studies of the genetic control, the epigenetic factors and/or environmental influences acting on dental development. We seek contributions from the fields of developmental genetics and epigenetics that highlight the mechanisms behind the attainment of tooth size and shape or the development of microstructures. We invite papers covering the diversity of tooth development in vertebrates and welcome functional or descriptive analyses questioning the factors influencing intraspecific variation during odontogenesis. This session includes studies performed in model as well as in non-model organisms.

8. New methods in dental studies

We invite contributions on cutting-edge methods used to extract biological and palaeobiological information from teeth and their surrounding structures. Applications from different fields such as imaging, morphometry, rheology, wear, tribology, geochemistry, etc. are welcomed.