



Editorial



The development of a stomatognathic system and tooth formation in until then aqueous living vertebrates (about 400 million years ago) represent a key step in evolution and has been in the focus of interdisciplinary research as well as research of morphologists, paleontologists, anthropologists or clinicians for a long time. Since the 19th century, a broad spectrum of scientific fields including evolutionary and comparative biology of teeth, dental morphology, anthropology, forensics and paleopathology (paleodontology) or cultural history of teeth has been evolved. The research tools applied in these disciplines nowadays cover macroscopical or physico-chemical, but also histological, and even molecular and genetical methods.

In 1965, a group of enthusiastic scientists organized the 1st International Symposium on Dental Morphology in Fredensborg, Denmark, with the aim to provide a place for interdisciplinary communication and discussion concerning dental morphology, anthropology, evolution and related fields. Since 1995 the symposium has been organized every three years, formerly at intervals of four years. It took place in London, Brussels, Cambridge, Turku, Reykjavik, Paris, Jerusalem, Florence, Berlin, Oulu, Sheffield, Lodz, Greifswald and Newcastle upon Tyne. In 2011, at the 15th International Symposium on Dental Morphology held in Newcastle upon Tyne, it was decided to host the next meeting in Zagreb in 2014.

Table 1
Previous symposia and their publications.

	Symposium location	Year	Year of publication	Title	Editor(s)
1	Fredensborg Denmark	1965	1967	Proceedings of the International Symposium on Dental Morphology. <i>J Dent Res</i> 46 (Suppl):769–992	PO Pedersen, AA Dahlberg and V Alexandersen AA Dahlberg
2	London England	1968	1971	Dental Morphology and Evolution. Chicago, University of Chicago Press	–
3	Brussels Belgium	1971	–	–	–
4	Cambridge England	1974	1978	Development, Function and Evolution of Teeth. London, Academic Press	PM Butler, KA Joysey
5	Turku Finland	1979	1982	Teeth: Form, Function and Evolution. New York, Columbia University Press	B Kurten
6	Reykjavik Iceland	1983	–	–	–
7	Paris French	1986	1988	Teeth Revisited: Proceedings of the VII International Symposium on Dental Morphology. <i>Memoires du Museum National D'Histoire Naturelle, Sciences de la Terre</i> , vol 53	DE Russel, J-P Santoro, D Sigogneau-Russel
8	Jerusalem Israel	1989	1992	Structure, Function and Evolution of Teeth. London, Freund Publishing	P Smith, E Tchernov
9	Florence Italy	1992	1995	Aspects of Dental Biology: Palaeontology, Anthropology and Evolution. Florence, International Institute for the Study of Man	J Moggi Cecchi
10	Berlin Germany	1995	1995	Proceedings of the 10th International Symposium on Dental Morphology. Berlin, M. Marketing Services	RJ Radlanski, H Renz
11	Oulu Finland	1998	1999	Dental Morphology 1998. Finland, Oulu University Press	JT Mayhall, T Heikkinen
12	Sheffield England	2001	2001	Dental Morphology 2001. Sheffield, Sheffield Academic Press	A Brook
13	Lodz Poland	2005	2005	Current Trends in Dental Morphology. Lodz, University of Lodz Press	E Zadzinska
14	Greifswald Germany	2008	2009	Comparative Dental Morphology. Basel, Karger	T Koppe, G Meyer, KW Alt
15	Newcastle upon Tyne England	2011	2013	Proceedings of the 15th International Symposium on Dental Morphology Newcastle upon Tyne, UK, 2011. <i>Bull Int Assoc Paleodont.</i> 2013;7(1): 56–145	W Dirks

The 16th International Symposium on Dental Morphology and the 1st Congress of the International Association for Paleodontology (ISDM IAPO 2014) were held from 26 to 30 August 2014 in Zagreb, Croatia, 115 years after the first research studies had been carried out on Neandertal bones found in the nearby Krapina site. This joint meeting was organized by the School of Dental Medicine University of Zagreb, the International Association for Paleodontology and the Croatian Association of Forensic Dentists. Over 200 participants (more than ever before) from 36 countries presented 150 abstracts (oral (80), posters (70)) during five days. In memory of Christy G. Turner II, a very famous American anthropologist known for his research on dental anthropology, the best poster presented by Shannon C. McFarlin was awarded the Christy G. Turner II Award. Outstanding expert scientists were invited to act as scientific and/or organizing board members: Hrvoje Brkic (Croatia), Roberto Cameriere (Italy), Renata Chalas (Poland), Wendy Dirks (UK), Jelena Dumancic (Croatia), David W Frayer (USA), Ivan K Galic (Croatia), Eisaku Kanazawa (Japan), Dean Konjevic (Croatia), Thomas Koppe (Germany), Tomislav Lauc (Croatia), Mario Novak (Ireland), Anja Petaros (Croatia), Vilma Pinchi (Italy), Carlos David Rodriguez-Florez (Columbia), Ivana Savic Pavicin (Croatia), George Richard Scott (USA), Mario Slaus (Croatia), Tore T. Solheim (Norway), Huw F. Thomas (USA), Elzbieta Zadzińska (Poland), Ling-Xia Zhao (China), Andrei Valerievich Zinoviev (Russia), Amila Zukanovic (Bosnia and Herzegovina) and Selma Zukic (Bosnia and Herzegovina). We are very grateful to all of them. After the nomination and presentation of Prof. Andrei V. Zinoviev (State University

Tver, Russia), it was decided that the 17th International Symposium on Dental Morphology and 2nd Congress of the International Association for Paleodontology will be held in Tver, Russia, in 2017.

As shown in [Table 1](#), each symposium resulted in the publication of a volume with selected full text papers. These publications gave an insight on current aspects of research in dental morphology and related fields. This special issue of *Annals of Anatomy* includes a selection of 13 papers presented at the 16th International Symposium on Dental Morphology and 1st Congress of the International Association for Paleodontology. All manuscripts have been reviewed by at least two independent reviewers. This volume provides a wide overview of current research in dental morphology and biology, paleoanthropology and paleodontology and related fields.

We owe our special thanks to Prof. Friedrich Paulsen, who made it possible to publish the best papers of ISDM IAPO 2014 in a special issue of *Annals of Anatomy*.

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