



genes



an Open Access Journal by MDPI

Advances in Genetic Diseases of Teeth

Guest Editors:

Dr. Yongbo Lu

Department of Biomedical Sciences, Texas A&M University College of Dentistry, 3302 Gaston Ave, Dallas, TX 75246, USA

Prof. Dr. Chunlin Qin

Department of Biomedical Sciences, Texas A&M University College of Dentistry, 3302 Gaston Ave, Dallas, TX 75246, USA

Prof. Dr. Thomas G. H. Diekwisch

Department of Periodontics, Texas A&M University College of Dentistry, 3302 Gaston Ave, Dallas, TX 75246, USA

Deadline for manuscript submissions:

closed (15 March 2023)

Message from the Guest Editors

Healthy teeth are comprised of three mineralized tissues, enamel, dentin, and cementum. These three unique mineralized tissues are fabricated by highly specialized cells: ameloblasts, odontoblasts, and cementoblasts. Initial studies of hereditary tooth defects have focused on the extracellular effects of mutant proteins involved in amelogenesis, dentinogenesis, and cementogenesis. However, in recent years there has been increasing evidence suggesting that mutant matrix proteins such as amelogenin, enamelin, or dentin sialophosphoprotein are prone to misfolding, resulting in intracellular pathologies such as endoplasmic reticulum (ER) stress and unfolded protein response (UPR), which in turn affect the composition and mechanical properties of dental mineralized tissues.

This Special Issue aims to publish case reports, original research articles, and critical reviews that report recent advances in inherited tooth defects, including the identification of novel gene mutations, the elucidation of cellular and molecular mechanisms, the generation of animal models to investigate the pathogenesis of a mutant gene/protein, and the development of therapeutic interventions.



mdpi.com/si/102595

Special Issue



genes



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Selvarangan Ponnazhagan

Department of Pathology, The University of Alabama at Birmingham, 1825 University Blvd, SHEL 814, Birmingham, AL 35294-2182, USA

Message from the Editor-in-Chief

Genes are central to our understanding of biology, and modern advances such as genomics and genome editing have maintained genetics as a vibrant, diverse and fastmoving field. There is a need for good quality, open access journals in this area, and the *Genes* team aims to provide expert manuscript handling, serious peer review, and rapid publication across the whole discipline of genetics. Starting in 2010, the journal is now well established and recognised.

Why not consider *Genes* for your next genetics paper?

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, and other databases.

Journal Rank: JCR - Q2 (*Genetics and Heredity*) / CiteScore - Q2 (*Genetics (clinical)*)

Contact Us

Genes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/genes
genes@mdpi.com
[X@Genes_MDPI](#)