

# Dent J Health Sci Univ Hokkaido

## REVIEW

- 1 Interface of physical chemistry and dental materials science  
Takashi NEZU ..... (61)

## MINI REVIEW

- 13 The Beginning of Application of Quorum Quenching for Replacing Traditional Antibiotics  
Izumi MASHIMA, Futoshi NAKAZAWA ..... (73)

## COMMENTARY

- 17 Application manual for ethical review before beginning epidemiological or clinical new research project  
(The first version)  
Takanori SHIBATA, Taichi ISOBE, Takashi SAITO, Yasushi FURUICHI, Masahiro IEKO,  
Yasunori SAKAKURA, Akihiko TANIMURA, Mizuho HIMEJIMA, Mari MORI ..... (77)

## ABSTRACT OF DOCTORAL DISSERTATION

- 33 Biological activation of the zirconia surface by chemical modification method using IGF-1  
Daisuke ITO ..... (93)
- 37 A genome-wide association study of periodontitis in a Japanese population  
-Multicenter Research for periodontitis susceptibility gene-  
Shintaro SHIMIZU ..... (97)

## DENTAL INFORMATION

- 40 Recent topics ..... (100)