Division of Oral Regenerative Medicine Department of Human Biology and Pathophysiology

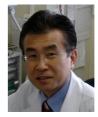
Greeting

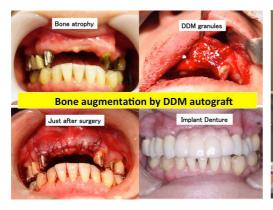
Our team is a hub for dentin matrix-based therapy in bone regenerative surgery. Human dentin graft was clinically achieved first in 2002 by our team, and has been expanding and outgrowing rapidly as **Dental Innovation**. The Asian OB/OG with ambitious spirits have been working to become a cross-link between basic and clinical for world-wide medical contribution. Bone is reborn by dentin. **Be a clinical scientist!**

Main Research: Bone inductive regeneration

- 1. Ultrasonically demineralized bone/dentin (DBM/DDM) graft
- 2. Patient-own dentin matrix graft
- 3. Application of acidic electrized water

Chief Professor: Dr. Masaru Murata (DDS, PhD) Birth:1961







OG/OB Doctors

Dr. Md. Arafat Kabir (2015 PhD, Pioneer Dental College, Bangladesh) Awards: 4

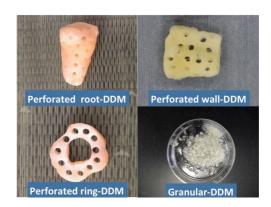
Dr. Mamata Shakya (2018 PhD, Katmandu University, Nepal)

Dr. Kenji Yokozeki (2019 PhD, HSUH, Sapporo) Award: 1

Dr. Keiko Onji (2019 PhD, Takeru Dental Clinic, Tokyo)

Dr. Bowen Zhu (2022 PhD, Fujian Medical University, China) Award: 1





Accomplishments (2019-)

Rising Scientist Award: 2022 Japanese Stomatological Society (Yokozeki)

Excellent Presentation Award: 2021 Hard Tissue Regenerative Biology (Zhu)

Distinguished Scientist Award: 2020 Hard Tissue Regenerative Biology (Murata)

Excellent Presentation Award: 2019 Hard Tissue Regenerative Biology (Kabir)

Excellent Presentation Award: 2019 Living Body-related Ceramics Conference (Kabir)

Invited Lecture: 2019 German Congress of Oral and Maxillofacial Surgeons (Murata)

Main Original Papers (2020-2023)

- 1. Kuroyama K, et al. Development of bioinspired damage-tolerant calcium phosphate bulk materials. Science and Technology of Advanced Materials, 2023, 24(1)2261836. IF:7.662
- 2. Murata M, et al. Twenty Years-Passed Case of Demineralized Dentin Matrix Autograft for Sinus Bone Augmentation A First Case of Dentin Graft in Human -. Journal of Clinical and Experimental Dentistry, 2023, 15(10)e861-5. IF:0.403
- 3. Kabir MA, et al. Mechanical Properties of Human Concentrated Growth Factor (CGF) Membrane and the CGF Graft with Bone Morphogenetic Protein-2 (BMP-2) onto Periosteum of the Skull of Nude Mice. Int J Mol Sci. **2021**, 22, 11331 IF:5.924
- 4. Zhu B, et al. Chemical Properties of Human Dentin Blocks and Vertical Augmentation by Ultrasonically Demineralized Dentin Matrix Blocks on Scratched Skull without Periosteum of Adult-Aged Rats. Materials (Basel). 2021, 24;15(1):105. IF:3.623
- 5. Shakya M, et al. Accelerated Bone Induction of Adult Rat Compact Bone Plate Scratched by Ultrasonic Scaler Using Acidic Electrolyzed Water. Materials (Basel). **2021**,14(12):3347. IF:3.623
- 6. Murata M, et al. Osteoinduction in Novel Micropores of Partially Dissolved and Precipitated Hydroxyapatite Block in Scalp of Young Rats. Materials (Basel). **2021**,14(1):196. IF:3.623
- 7. Kabir MA, et al. Bio-Absorption of Human Dentin-Derived Biomaterial in Sheep Critical-Size Iliac Defects. Materials (Basel). **2021**,14(1):223. IF:3.623
- 8. Onji K, Kabir MA, et al. Human Fresh Fibrin Membrane with BMP-2 Induces Bone Formation in the Subcutaneous Tissues of Nude Mice. Materials (Basel). **2020**,14(1):150. IF:3.623

Co-operation

Hokkaido Research Organization, Hokkaido University, Chitose Science/Technology University, Kyushu University, Osaka Dental University, Tokyo M&D University, Katmandu University

Company: Redox Technology, TOYOBO, One Tenth, Amino Up, GC, Korea Tooth Bank