

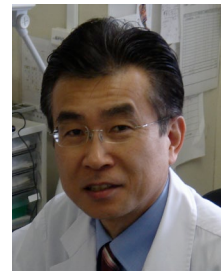
**Division of Oral Regenerative Medicine**  
**Department of Human Biology and Pathophysiology**

**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*. Bone is reborn by dentin. The Asian staffs with ambitious spirits have been working to become a cross-link between basic and clinical for world-wide medical contribution. *Be a clinical scientist !*

**Main Research: Bone inductive regeneration**

1. Ultrasonically demineralized bone/dentin (DBM/DDM) graft
2. Patient-own dentin matrix graft
3. Development of biomimetic materials

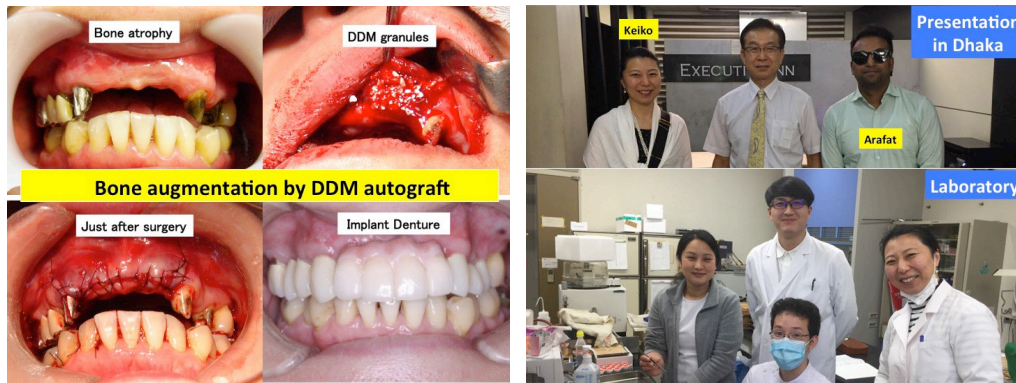


**Chief Professor      Dr. Masaru Murata (DDS, PhD)**

**Education and Professional position**

- 1988      D.D.S., School of Dentistry, Hokkaido University, Sapporo, Japan
- 1993      Ph.D., Graduate School of Dentistry, Hokkaido University
- 1993-8    Assistant Professor, Oral Pathology, Okayama University
- 1995      Researcher, Medical Biology, University of Louis Pasteur, France
- 2004-5    Project leader, Bio-recycle Medical System of Teeth, Japan METI grant
- 2007-16   Associate Professor, Oral and Maxillofacial Surgery, HSUH, Japan
- 2013-16   Visiting Professor, Pioneer Dental College, Dhaka, Bangladesh

\*Awards: 5,   Licenses: 4,   Patents: 3 (Japan), 1 (USA)



### OG/OB/ PhD-course Doctors

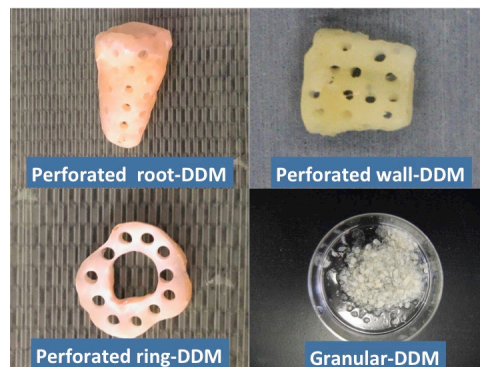
**Dr. Md. Arafat Kabir** (2015 PhD, Pioneer Dental College, Bangladesh) Awards: 4

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

**Dr. Kenji Yokozeki** (2019 PhD, HSUH, Sapporo)

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

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



### **Accomplishments (2019-2021)**

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 (2020-2021)**

1. 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](#)
2. 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 Dec 24;15(1):105. [IF:3.623](#)

3. Shakya M, et al. Accelerated Bone Induction of Adult Rat Compact Bone Plate Scratched by Ultrasonic Scaler Using Acidic Electrolyzed Water. *Materials (Basel)*. 2021 Jun 17;14(12):3347. [IF:3.623](#)
4. Murata M, et al. Osteoinduction in Novel Micropores of Partially Dissolved and Precipitated Hydroxyapatite Block in Scalp of Young Rats. *Materials (Basel)*. 2021 Jan 3;14(1):196. [IF:3.623](#)
5. Kabir MA, Murata M, Shakya M, Yamada K, Akazawa T. Bio-Absorption of Human Dentin-Derived Biomaterial in Sheep Critical-Size Iliac Defects. *Materials (Basel)*. **2021**;14(1):223. [IF:3.623](#)
6. Onji K, Kabir MA, Zhu B, Yokozeki K, Saito T, Akazawa T, Murata M. Human Fresh Fibrin Membrane with Bone Morphogenetic Protein-2 (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, Katmandu University  
Company: Redox Technology, GC, TOYOBO, One Tenth