

Professor  
Oral and Maxillofacial Surgery, Oral Health Sciences,  
Medical and Dental Sciences, Graduate School of Medical and Dental Sciences

## Hiroyuki Harada

The number of oral cancer patients is increasing along with population aging. Over 8,500 new oral cancer patients are diagnosed each year in Japan. In these circumstances, the expertise of Professor Hiroyuki Harada, who specializes in oral cancer surgery, is in great demand.



“100% universally effective treatment may be unattainable. But never cease endeavoring to save every patient”

**TMDU DENTAL HOSPITAL'S** Clinic for Oral and Maxillofacial Rehabilitation performs various surgical treatments for oral cancer, oral mucosa diseases and other conditions as well as wisdom teeth extraction and mandible rebuilding. Above all, the clinic has an outstanding track record for oral cancer treatment, devoting its expertise to some 240 oral cancer patients each year.

Professor Hiroyuki Harada, who has been combating oral cancer for more than 20 years, is the director of the clinic. Based on his great experience as an oral and maxillofacial surgeon, he has noticed a change in patients lately. “Although definitive data are lacking, my impression is that the mandibles of young people in recent years tend to be underdeveloped. Consequently, more wisdom teeth are growing sideways or backward. And since an underdeveloped mandible restricts how wide a patient can open his or her mouth, it is becoming more difficult to treat wisdom teeth.”

### Surgery to retain patients' ability to speak and bite

Professor Harada's fascination with oral surgery began when he was a dental student. “As a young man, I was hungry for knowledge and thus eager to gain experience in various aspects of surgery. But the department had many young medical staff in those days and

one had to wait for one's turn to participate in surgery. So it took several years to become a fully fledged surgeon. I was fortunate in that I had a superb mentor who did his best to give me as many opportunities as possible. Five years after graduating, I conceived an ambition to become an oral cancer specialist.”

As an oral cancer specialist, Professor Harada's guiding principle is to do everything he can to preserve oral functions to the maximum extent possible. “Oral cancer is treated with surgery to remove tumors but this surgery may result in a loss of oral functions. As speaking and eating are important functions associated with the quality of life (QOL), our treatment policy emphasizes preserving these functions. We also emphasize the checking of functions after surgery and pursuing rehabilitation.”

### Patient's death prompted personal mission to save as many patients as possible

Only once in his career did Professor Harada consider quitting his job as an oral surgeon. “Early on in my career, I had a male cancer patient who was about 50 years old. His cancer kept recurring and he suffered from multiple cancers. In the end, he passed away despite the treatment. His death weighed on my mind and for a while all I could think about was whether I could have

saved him if I had done this, that or the other. I even thought of leaving the university hospital to become a general practitioner. Though aware 100% universally effective treatment may be unattainable, I resolved that I would never cease endeavoring to save every patient.”

Professor Harada's personal mission continues to inform everything he does. As director of the Clinic for Oral and Maxillofacial Rehabilitation, he is striving to save as many patients as possible. Looking to the future, he has high expectations of the talented young surgeons who will devote themselves to this great work in generations to come. “In the world of oral surgery, the method of teeth extraction and the surgical instruments we use have been essentially unchanged for about 100 years. So many methods for diagnosis and treatment are ripe for improvement. It is my earnest desire that young doctors will have big dreams, acquire knowledge and skills, and change the world by deploying new expertise.”

#### Hiroyuki Harada

Graduated from Faculty of Dentistry, Hokkaido University in 1991. After working in the Oral and Maxillofacial Surgery Department of Hokkaido University Hospital and the Head and Neck Surgery Department of the Chiba Cancer Center, he joined TMDU Dental Hospital in 2001. Assumed his current position in 2015. Japanese Society of Oral and Maxillofacial Surgeons' Board Certified Specialist/Medical Adviser in Oral and Maxillofacial Surgery, Japanese Society of Oral Oncology Certified Medical Adviser for Oral Cancer, and Japanese Board of Cancer Therapy Certified Cancer Therapist. He is a specialist in oral cancer surgery. He also researches cancer metastasis and invasion mechanisms.

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## Kyoko Ohno-Matsui

Professor Kyoko Ohno-Matsui is a specialist in pathologic myopia, a condition that can result in visual loss. She discusses her personal development as a medical practitioner who deals with huge amounts of images and medical records.



“Never-ending stream of discoveries and surprises: Checking medical records of 100 patients a week”

**TMDU MEDICAL HOSPITAL'S** Advanced Clinical Center for Myopia started full-scale operation in November 2019. The center's director, Dr. Kyoko Ohno-Matsui, professor of ophthalmology and visual science, is an expert in the treatment of severe myopia and glasses myopia.

Although myopia can often be corrected by wearing spectacles, this approach is typically ineffective in the case of severe myopia, which often leads to pathologic myopia whose complications include glaucoma and retinal detachment. If symptoms progress, there is a risk of blindness. Pointing out the risks associated with myopia, Professor Ohno-Matsui notes that myopia is ranked fourth in a list of the factors accounting for vision loss in Japan. “With pathologic myopia, extension and/or deformation of the length of the eyeball (ocular axial length) can cause various disorders of the optic nerves and the macula of the retina. Even mild myopia triples the risk of glaucoma. As well as treating eye complications associated with severe myopia, the Advanced Clinical Center for Myopia emphasizes preventive treatment and guidance to mitigate the progress of childhood myopia and mild or intermediate myopia.”

### Enchanted by the beauty of the eyes, observation of all the images becomes a fascinating daily task

Working as an ophthalmologist, Professor Ohno-Matsui became enchanted by the beauty of the eye. “Observing the eye fundus, you can directly see the blood vessels. I love watching them. For example, early on in my career, I used to read the medical records of all the patients in alphabetical order and observed all the fundus photographs. This self-imposed task undertaken in the office after completing the day's work was a source of great pleasure to me.”

But there is far more to the eyes than their sheer beauty. Vision is essential for a healthy life. Professor Ohno-Matsui recalls a patient who underwent an eye operation. “While contending with cancer, the patient was afflicted with a fungal infection that resulted in blindness, undermining his motivation to overcome cancer. Following an operation on his eyes, the patient regained his sight. Moved to tears by this extraordinary reversal of his blindness, he regained the will to persevere with the cancer treatment.”

### Seeing is believing: put your trust in what you can confirm with your own eyes, not textbooks

Although textbooks and celebrated physicians can be illuminating, Professor Ohno-Matsui always seeks confirmation through her own eyes. She stresses the importance of learning from one's patients and from how they

respond to medical treatment. “I continue to thoroughly check the medical records of every one of my 100 or so outpatients with severe myopia. From medical consultations, I get clues that help me elucidate pathologic conditions. It's a never-ending stream of discoveries and surprises.”

In parallel with clinical treatment, Professor Ohno-Matsui is doing research with the aim of establishing a treatment method for pathologic myopia, a condition resistant to conventional treatment. The techniques being studied include mitigating eyeball deformation by fixing the rear part of the eyeball and affixing cultured cells of the patient to the eyeball. Expectations are rising that early diagnosis and treatment of pathologic myopia is within reach.



As a postdoctoral fellow at Johns Hopkins University

#### Kyoko Ohno-Matsui

Graduated from the Faculty of Medicine, Yokohama City University in 1987. MD, PhD. Joined the Ophthalmology and Visual Science medical staff at TMDU in 1990. Following a postdoctoral fellowship at Johns Hopkins University, she assumed her current position in 2014. Specializing in myopia, fundus diseases, and macular diseases. Having launched the Japan Myopia Society in 2016, she is preparing guidelines for treatment of myopia, researching pathologic myopia, and pursuing awareness-raising activities. Director of TMDU Medical Hospital's Advanced Clinical Center for Myopia established in May 2019.