The reviews in this issue of the *Journal of Oral Science* celebrate Prof. Koichi Iwata’s retirement from Nihon University School of Dentistry.

Prof. Iwata has been a great physiologist in the field of trigeminal pain research. The characteristic features of his studies are physically consuming, laborious, and sometimes very challenging: e.g. intracellular recording in vivo and extracellular recording of cortical neural activities in awake monkeys during pain-related task performance. He preferred to approach clinical problem-based themes in dentistry, and has focused on a wide range of mechanisms for orofacial pain, i.e. from the peripheral nerve to the cerebral cortex.

He graduated from Nihon University School of Dentistry and started his research activity at Nihon University Graduate School of Dentistry in 1979. His mentors were Prof. Sumino at Nihon University and Prof. Homma at Chiba University School of Medicine. In 1985, his first publication in the international journal, *Brain Research*, focused on masseter nerve stimulation-evoked cortical field potential in the cat cerebral cortex, and then, he published a series of papers in terms of cortical evoked potentials responding to orofacial somatosensory stimulation. These studies are integrated in the intracellular recording study published in the *Journal of Neurophysiology* in 1994. He stayed in Prof. Dubner’s lab in the National Institute of Health (Bethesda, Maryland) as a postdoctoral fellow from 1987 to 1990, and engaged in studying the mechanism for orofacial somatosensory information processing in the cerebral cortex using awake monkeys, especially focusing on higher aspect of nociceptive information processing. In 1998, he moved to Osaka University Graduate School of Dentistry, and carried out research on the mechanisms of neuropathic pain in various model rats. In 2002, he returned to Nihon University as chair of the Department of Physiology, and has published numerous excellent studies in the *Journal of Neuroscience, Pain, Anesthesiology*, etc. Among these studies, articles clarifying glial mechanisms for the induction of allodynia had a significant impact on research of the trigeminal nervous system.

Throughout his research activities, he nurtured many researchers in the field of physiology and anatomy, many of whom have become to be principal investigators in medical and dental schools in Japan. He developed a world-wide research network in the United States of America, Canada, Israel, South Korea, Taiwan, and Japan.

Here, his colleagues contribute their reviews to this issue as a testament to Prof. Iwata’s great scientific activities.

On behalf of the authors,

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