

Division of Oral Medicine and Pathology
Department of Human Biology and Pathophysiology

Outline

The specialty of oral medicine and pathology is concerned with diagnosis and study of the causes and effects of diseases affecting the oral and maxillofacial region. We perform pathological diagnosis of the surgical specimens obtained from oral and maxillofacial regions. We see the patients mainly suffering from oral psychosomatic disorders such as burning mouth syndrome, atypical odontalgia and dry mouth at the “Oral Medicine Consultation Clinic” in our hospital. Our research interests are shown below.

Faculty members

Professor; Yoshihiro ABIKO, B.A.,C.P.P., D.D.S., Ph.D.

Senior assistant professor ; Jun SATO, D.D.S., Ph.D., Koki YOSHIDA, D.D.S., Ph.D.

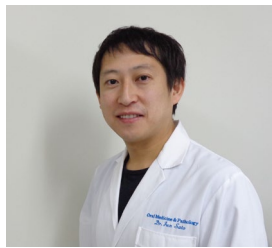
Assistant professor ; Tetsuro Morikawa, D.D.S., Ph.D.

Hospital assistant professor; Masafumi Utsunomiya, D.D.S., Ph.D.

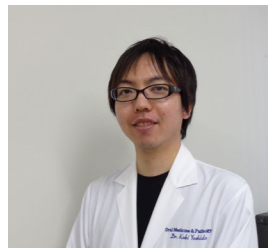
Graduate (Ph.D.) student ; Dedy ARIWANSA



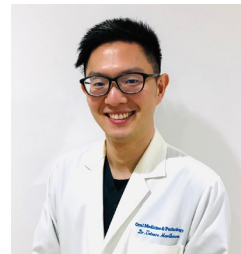
Yoshihiro ABIKO



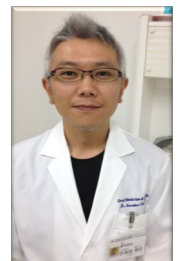
Jun SATO



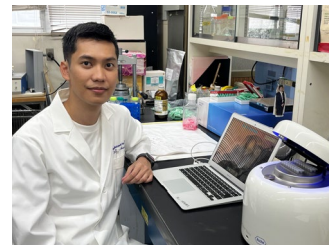
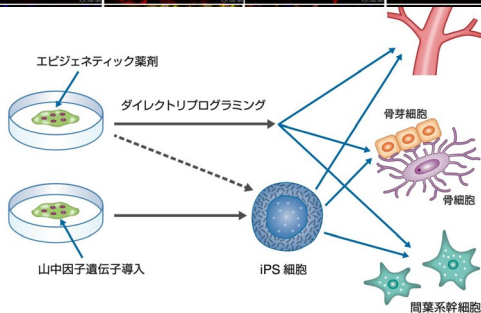
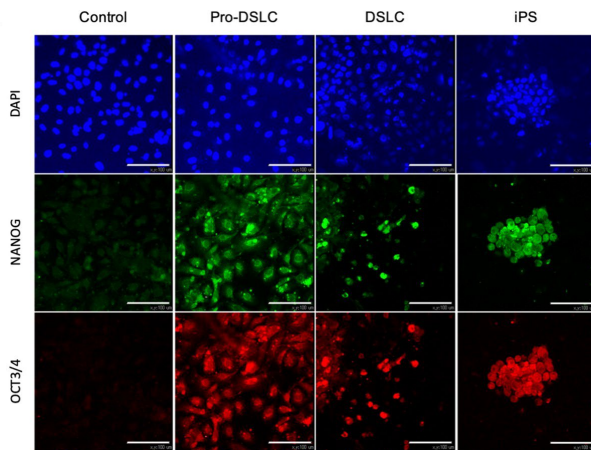
Koki YOSHIDA



Tetsuro MORIKAWA



Masafumi UTSUNOMIYA



Dedy ARIWANSA



Dr. Durga Paudel, on the left, earned a PhD here, became an assistant professor at the Advanced Research Institute, and then moved to the United States.

We used epigenetic techniques to reprogram Malassez epithelial cells into iPS-like cells and then differentiated them into vascular and bone cells. (Yoshida K et al, Scientific Reports 2021)。

Recent publications

- 1: Paudel D, Uehara O, Giri S, Morikawa T, Yoshida K, Kitagawa T, Ariwansa D, Acharya N, Ninomiya K, Kuramitsu Y, Ohta T, Kobayashi M, Abiko Y. Transcriptomic analysis of the submandibular gland under psychological stress condition. *J Oral Pathol Med*. 2024 Feb;53(2):150-158.
- 2: Morikawa T, Paudel D, Uehara O, Ariwansa D, Kobayashi Y, Yang J, Yoshida K, Abiko Y. Effect of *Laurus nobilis* leaf extract (Lauresh) on oral and gut microbiota diversity in mice. *In Vivo* 2024 May
- 3: Khurelchuluun A, Morikawa T, Uehara O, Paudel D, Sakata M, Shibata H, Yoshida K, Nagayasu H, Abiko Y. Effect of Bee Pollen on a Human Skin Keratinocyte Cell Line, PHK16-0b, Exposed to Ultraviolet B Radiation. *J Cosmetic Sci*. 2024 Jan;75(1):1-10.
- 4: Kawano Y, Tanaka M, Satoh Y, Sugino S, Suzuki J, Fujishima M, Okumura E, Takekoshi H, Uehara O, Sugita S, Abiko Y, Tomonari T, Tanaka H, Takeda H, Takayama T. *Acanthopanax senticosus* ameliorates steatohepatitis through HNF4 alpha pathway activation in mice. *Sci Rep*. 2024 Jan 2;14(1):110.
- 5: Uehara O, Nakamoto N, Hiraki D, Paudel D, Sugiyama N, Morikawa T, Yoshida K, Kawano Y, Shimo T, Furuichi Y, Miura H, Abiko Y. Effects of prolonged stimulation with heated tobacco products (Ploom TECH+) on gingival epithelial cells. *J Periodontal Res*. 2023 Jun;58(3):553-563.
- 6: Morikawa T, Uehara O, Paudel D, Yoshida K, Harada F, Hiraki D, Sato J, Matsuoka H, Kuramitsu Y, Michikawa M, Abiko Y. Systemic Administration of Lipopolysaccharide from *Porphyromonas gingivalis* Decreases Neprilysin Expression in the Mouse Hippocampus. *In Vivo*. 2023;37(1):163-172.
- 7: Paudel D, Uehara O, Giri S, Yoshida K, Morikawa T, Kitagawa T, Matsuoka H, Miura H, Toyofuku A, Kuramitsu Y, Ohta T, Kobayashi M, Abiko Y. Effect of psychological stress on the oral-gut microbiota and the potential oral-gut-brain axis. *Jpn Dent Sci Rev*. 2022 Nov;58:365-375.
- 6: Giri S, Uehara O, Takada A, Paudel D, Morikawa T, Arakawa T, Nagasawa T, Abiko Y, Furuichi Y. The effect of *Porphyromonas gingivalis* on the gut microbiome of mice in relation to aging. *J Periodontal Res*. 2022 Dec;57(6):1256-1266.
- 7: Uehara O, Bi J, Zhuang D, Koivisto L, Abiko Y, Häkkinen L, Larjava H. Altered composition of the oral microbiome in integrin beta 6-deficient mouse. *J Oral Microbiol*. 2022 Sep 12;14(1):2122283.
- 8: Ninomiya K, Paudel D, Uehara O, Morikawa T, Islam ST, Khurelchuluun A, Ariwansa D, Yoshida K, Matsuoka H, Hajime H, Kayoko F, Nakamura K, Abiko Y. Effect of Systemic Administration of Amitriptyline on Oral Microbes in Rats. *In Vivo*. 2022 Sep-Oct;36(5):2134-2142.
- 9: Onishi A, Yoshida K, Morikawa T, Paudel D, Takahashi S, Khurelchuluun A, Ariwansa D, Harada F, Uehara O, Kurashige Y, Abiko Y. Induction of Periodontal Ligament-like Cells by Coculture of Dental Pulp Cells, Dedifferentiated Cells Generated from Epithelial Cell Rests of Malassez, and Umbilical Vein Endothelial Cells. *J Endod*. 2022 Nov;48(11):1387-1394.
- 10: Utsunomiya M, Matsuoka H, Takenoshita M, Toyofuku A, Miura H, Abiko Y. The influence of intolerance of uncertainty on the correlation between the severity of symptoms and satisfaction with oral state in patients with burning mouth syndrome. *Clin Oral Investig*. 2022 Nov;26(11):6563-6568.
- 11: Paudel D, Kuramitsu Y, Uehara O, Morikawa T, Yoshida K, Giri S, Islam ST, Kitagawa T, Kondo T, Sasaki K, Matsuoka H, Miura H, Abiko Y. Proteomic and microbiota analyses of the oral cavity during psychological stress. *PLoS One*. 2022 May 25;17(5)
- 12: Sugiyama N, Uehara O, Morikawa T, Paudel D, Ebata K, Hiraki D, Harada F, Yoshida K, Kato S, Nagasawa T, Miura H, Abiko Y, Furuichi Y. Gut flora alterations due to lipopolysaccharide derived from *Porphyromonas gingivalis*. *Odontology*. 2022 Oct;110(4):673-681.
- 13: Uehara O, Abiko Y, Nagasawa T, Morikawa T, Hiraki D, Harada F, Kawano Y, Toraya S, Matsuoka H, Paudel D, Shimizu S, Yoshida K, Asaka M, Furuichi Y, Miura H. Alterations in the oral microbiome of individuals with a healthy oral environment following COVID-19 vaccination. *BMC Oral Health*. 2022 Mar 3;22(1):50.
- 14: Islam ST, Kurashige Y, Minowa E, Yoshida K, Paudel D, Uehara O, Okada Y, Bolortsetseg D, Sakakibara S, Abiko Y, Saitoh M. Analysis of the cells isolated from epithelial cell rests of Malassez through single-cell limiting dilution. *Sci Rep*. 2022 Jan 10;12(1):382.