

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

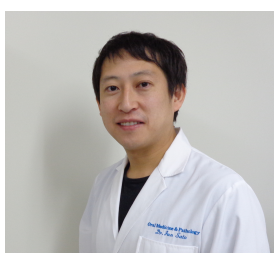
Professor ; Yoshihiro ABIKO, B.A.,C.P.P., D.D.S., Ph.D.

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

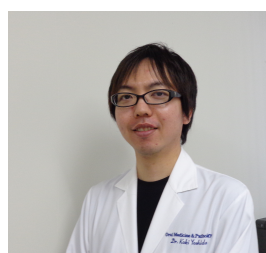
Assistant professor ; Tetsuro Morikawa, D.D.S., Ph.D.



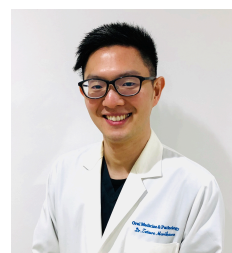
Yoshihiro ABIKO



Jun SATO



Koki YOSHIDA



Tetsuro MORIKAWA

Postgraduate students

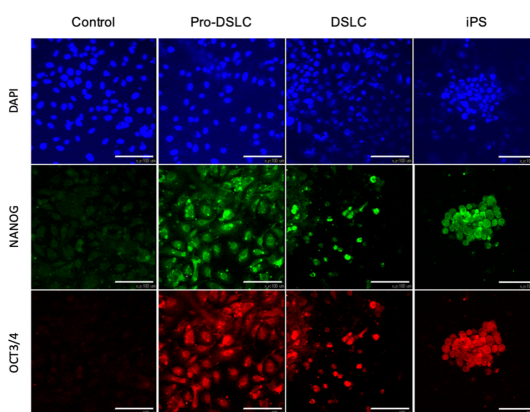
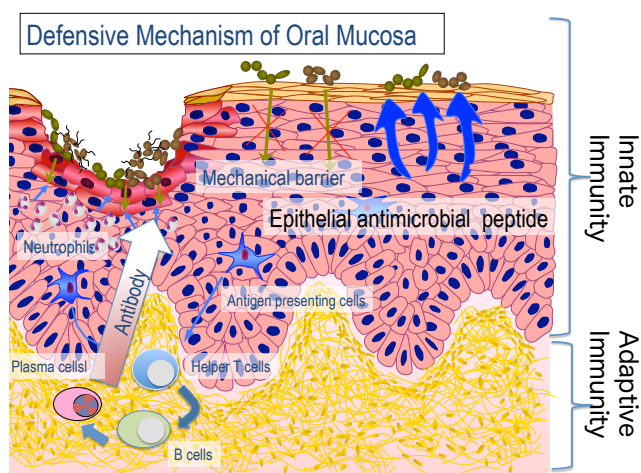
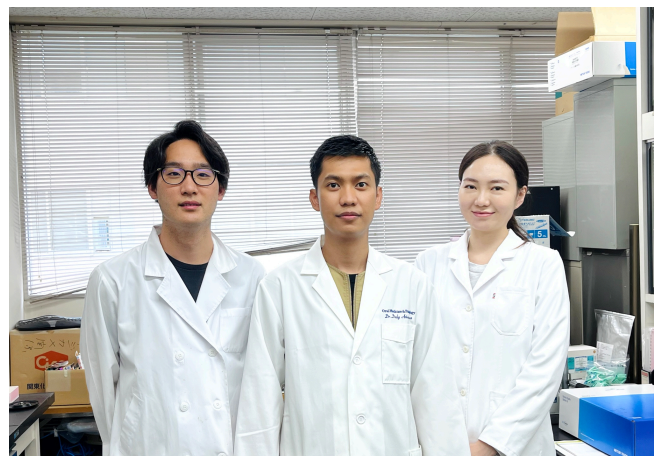
Shuhei TAKAHASHI, D.D.S.

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Dedy ARIWANSA, D.D.S.

Main research in progress

- 1) Epithelia antimicrobial peptides in oral health and diseases
- 2) Involved in epigenetics in oral diseases
- 3) Application of Epithelial rest of Malassez for tissue regeneration
- 4) Elucidation of the pathogenesis of the medically unexplained oral symptom
- 5) Alteration of oral flora in systemic diseases



Reprogramming of Epithelial rest of Malassez by epigenetic agents

Some of the recent publications

- 1: 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 Jul 6.
- 2: 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)
- 3: 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.
- 4: 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.
- 5: 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 Mar 25.
- 6: Watanabe K, Watanabe M, Takao C, Hong C, Liu Z, Suga T, Tu TTH, Sakamoto J, Umezaki Y, Yoshikawa T, Takenoshita M, Uezato A, Motomura H, Kurabayashi T, Abiko Y, Toyofuku A. Clinical Characteristics of Predominantly Unilateral Oral Ctenosthopathy With and Without Neurovascular Contact. *Front Neurol.* 2021 Sep 20
- 7: Khurelchuluun A, Uehara O, Paudel D, Morikawa T, Kawano Y, Sakata M, Shibata H, Yoshida, K Jun Sato J, Miura H, Nagayasu H, Abiko Y. Bee pollen diet alters the bacterial flora and antimicrobial peptides in the oral cavities of mice. *Foods* 2021,
- 8: Islam S, Kitagawa T, Baron B, Abiko Y, Chiba I, Kuramitsu Y. ITGA2, LAMB3, and LAMC2 may be the potential therapeutic targets in pancreatic ductal adenocarcinoma: an integrated bioinformatics analysis. *Sci Rep.* 2021 May 18;11(1):10563.
- 9: Kawano Y, Tanaka M, Fujishima M, Okumura E, Takekoshi H, Takada K, Uehara O, Abiko Y, Takeda H. *Acanthopanax senticosus* Harms extract causes G0/G1 cell cycle arrest and autophagy via inhibition of Rubicon in human liver cancer cells. *Oncol Rep.* 2021 Mar;45(3):1193-1201.
- 10: Yoshida K, Uehara O, Kurashige Y, Paudel D, Onishi A, Neopane P, Hiraki D, Morikawa T, Harada F, Takai R, Sato J, Saitoh M, Abiko Y. Direct reprogramming of epithelial cell rests of malassez into mesenchymal-like cells by epigenetic agents. *Sci Rep.* 2021 Jan 20;11(1):1852.
- 11: Xiong B, Shirai K, Matsumoto K, Abiko Y, Furuichi Y. The potential of a surface pre-reacted glass root canal dressing for treating apical periodontitis in rats. *Int Endod J.* 2021 Feb;54(2):255-267. (IF=3.8)
- 12: Adhikari BR, Yoshida K, Paudel D, Morikawa T, Uehara O, Sato J, Muthumala M, Amaratunga P, Arakawa T, Chiba I, Abiko Y. Aberrant expression of DUSP4 is a specific phenomenon in betel quid-related oral cancer. *Med Mol Morphol.* 2021 Jun;54(2):79-86.
- 13: Hiraki D, Uehara O, Kuramitsu Y, Morikawa T, Harada F, Yoshida K, Akino K, Chiba I, Asaka M, Abiko Y. *P. gingivalis* Lipopolysaccharide Stimulates the Upregulated Expression of the Pancreatic Cancer-Related Genes Regenerating Islet-Derived 3 A/G in Mouse Pancreas. *Int J Mol Sci.* 2020 Oct 5;21(19):7351.
- 14: Islam S, Uehara O, Matsuoka H, Kuramitsu Y, Adhikari BR, Hiraki D, Toraya S, Jayawardena A, Saito I, Muthumala M, Nagayasu H, Abiko Y, Chiba I. DNA hypermethylation of sirtuin 1 (SIRT1) caused by betel quid chewing-a possible predictive biomarker for malignant transformation. *Clin Epigenetics.* 2020 Jan 13;12(1):12.
- 15: Paudel D, Utsunomiya M, Yoshida K, Giri S, Uehara O, Matsuoka H, Chiba I, Toyofuku A, Abiko Y. Pharmacotherapy in relieving the symptoms of burning mouth syndrome: A 1-year follow-up study. *Oral Dis.* 2020 Jan;26(1):193-199.