

**CHUN-PIN CHIANG, Ph.D.**

Affiliation:

Oral Biology

School of Dentistry

National Taiwan University

E-mail address: cpchiang@ntu.edu.tw

URL: <http://ah.ntu.edu.tw/web/Teacher!one.action?tid=611>**Academic History:**

1. D.M.Sc. Oral Pathology, Harvard School of Dental Medicine, 1989.
2. B.D.S. Dentistry, National Taiwan University, 1977.

**Professional/Scientific Career:**

1. Dean & Professor of School of Dentistry, School of Dentistry, National Taiwan University.
2. Professor of Graduate Institute of Oral Biology, School of Dentistry, National Taiwan University.
3. Director of Department of Dentistry, NTUH.

**Awards/Professional Societies:**

1. Oral Diagnosis.
2. Immunohistochemistry .
3. Photodynamic Treatment.

**Research Area/ Interests:****1. Immunohistochemistry for Oral Lesions**

This study used monoclonal and polyclonal antibodies and immunohistochemical method to assess the expression of oncogenes, tumor suppressor genes, growth factors, growth factor receptors and cytokeratins in oral premalignant lesions, oral cancers, salivary gland tumors, odontogenic cysts, and odontogenic tumors. The expression of these particular proteins was further correlated with oral habits, clinical parameters (patient's sex, age, tumor location, tumor size, lymph node metastasis, clinical staging), and histopathological parameters by statistical analysis. This study will help us to understand the malignant potential of oral premalignant lesions and the mechanisms of the development of oral lesions.

**2. Photodynamic Diagnosis and Treatment of Oral Precancers and Oral cancers**

Recently, we develop autofluorescence and ALA-induced protoporphyrine IX (PpIX) fluorescence spectroscopy to diagnose oral precancers (OPC) and oral cancers (OC). By means of autofluorescence spectroscopy at 330-nm excitation and ALA-induced PpIX fluorescence spectroscopy at 410-nm excitation, we can differentiate among oral submucous fibrosis, normal oral mucosa, OPC and OC. Therefore, autofluorescence and ALA-induced PpIX fluorescence spectroscopy can be used to determine the appropriate sites for biopsy in a large leukoplakia or erythroplakia lesion. In addition, the photodynamic therapy (PDT) with topical application of 20% ALA (topical ALA-PDT) can be used to treat OPC and OC. Our results indicate that topical ALA-PDT is very effective for treating verrucous hyperplasia and erythroleukoplakia and has a high potential to be used for treating verrucous carcinoma and early invasive squamous cell carcinoma.

**Publications** \* corresponding author**Selected publications (Original article, ; Review, )**

1. Cheng SJ, Chen HM and Chiang CP (2015). Cryogun cryotherapy is the first-line treatment of choice for oral leukoplakia. Journal of Dental Sciences 10: 223-224. (SCI)

2. Chiang ML, Hsieh YJ, Tseng YL, Lin JR and Chiang CP (2014). Oral mucosal lesions and developmental anomalies in dental patients of a teaching hospital in Northern Taiwan. *Journal of Dental Sciences* 9: 69-77. (SCI)
3. Shen WR, Wang YP, Chang JYF, Yu SY, Chen HM and Chiang CP (2014). Perineural invasion and expression of nerve growth factor can predict the progression and prognosis of oral tongue squamous cell carcinoma. *Journal of Oral Pathology & Medicine* 43: 258-264. (SCI)
4. Sun A, Lin HP, Wang YP, Chen HM, Cheng SJ, Chiang CP (2013). Significant reduction of serum homocysteine level and oral symptoms after different vitamin supplement treatments in patients with burning mouth syndrome. *Journal of Oral Pathology & Medicine* doi: 10.1111/jop.12043 (SCI)
5. Cheng SJ, Liu YC, Cheng SL, Lee JJ, Chen HM, Chang HH, Kok SH, Kuo MYP, Chiang CP (2013). Expression of Gα12 predicts progression and prognosis of oral squamous cell carcinomas in Taiwan. *Journal of Oral Pathology & Medicine* DOI: 10.1111/jop.12050. (SCI)