

## RESEARCH – Selected Publications and Studies

### 2012 Publications

Lane P, Lam S, Follen M, MacAulay C. Oral Fluorescence Imaging Using 405-nm Excitation, Aiding the Discrimination of Cancers and Precancers by Identifying Changes in Collagen and Elastic Breakdown and Neovascularization in the Underlying Stroma. *Gen Med*. 2012 Feb;9(1 Suppl); S78-S82. e8

Lane P, Follen M, MacAulay C. Has Fluorescence Come of Age? A Case Series of Oral Precancers and Cancers Using White Light, Fluorescence Light at 405nm and Reflected Light at 545nm using the Trimira Identafi 3000. *Gen Med*. 2012 Feb;9(1 Suppl); S25-35

### 2011 Publications

Autofluorescence imaging to detect oral premalignant and malignant lesions V.M.T. Stepanek, A.E. Hellebust, D.M. Roblyer, M. Rahman, N. Vigneswaran, R. Richards-Kortum, A.M. Gillenwater; *World Dental-Online.com*, 12 January 2011.

### 2010 Publications

Comparison of multispectral wide-field optical imaging modalities to maximize image contrast for objective discrimination of oral neoplasia Darren Roblyer, Cristina Kurachi, Vanda Stepanek, Richard A. Schwarz, Michelle D. Williams, Adel K. El-Naggar, J. Jack Lee, Anne M. Gillenwater, and Rebecca Richards-Kortum; *Journal of Biomedical Optics*, Volume 15, Issue 6, e066017, Nov-Dec 2010

Advances in fluorescence imaging techniques to detect oral cancer and its precursors Dongsuk Shin, Nadarajah Vigneswaran, Ann Gillenwater, and Rebecca Richards-Kortum; *Future Oncology*, Volume 6, Issue 7, 1143-1154, 2010

Emerging roles for multimodal optical imaging in early cancer detection: a global challenge Noah Bedard, Mark Pierce, Adel El-Naggar, Sharmila Anandasabapathy, Ann Gillenwater, Rebecca Richards-Kortum; *Technol Cancer Res Treat*, 9, (2), 211-217, April 2010

### 2009 Publications

Objective Detection and Delineation of Oral Neoplasia Using Autofluorescence Imaging Darren Roblyer, Cristina Kurachi, Vanda Stepanek, Michelle D. Williams, Adel K. El-Naggar, J. Jack Lee, Ann M. Gillenwater, Rebecca Richards-Kortum; *Cancer Prev Res (Phila Pa)*, 2, (5), 423-431, May 2009

Fluorescence spectroscopy of oral tissue: Monte Carlo modeling with site-specific tissue properties Ina Pavlova, Crystal Redden Weber, Richard A. Schwarz, Michele Williams, Ann M. Gillenwater, Rebecca Richards-Kortum; *J Biomed Opt.*, 14 (1), 014009, January/February 2009

### 2008 Publications

Understanding the Biological Basis of Autofluorescence Imaging for Oral Cancer Detection: High-Resolution Fluorescence Microscopy in Viable Tissue Ina Pavlova, Michelle Williams, Adel El-Naggar, Rebecca Richards-Kortum, and Ann Gillenwater; Clin Cancer Res 2008;14(8) April 15, 2008

Model-based analysis of reflectance and fluorescence spectra for in vivo detection of cervical dysplasia and cancer; Redden Weber, C., Schwarz, R. A., Atkinson, E. N., Cox, D. D., Macaulay, C., Follen, M., Richards-Kortum, R. J Biomed Opt. 2008 Nov-Dec;13(6):064016

Multispectral optical imaging device for in vivo detection of oral neoplasia Roblyer, D., Richards-Kortum, R., Sokolov, K., El-Naggar, A. K., Williams, M. D., Kurachi, C., Gillenwater, A. M.; J Biomed Opt. 2008 Mar-Apr;13(2):024019