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1st Scientific Meeting of the Head and Neck Optical Diagnostics Society

London, UK. 14 March 2009

Edited by Colin Hopper, Adel K El-Naggar, Tahwinder Upile, Waseem Jerjes and HJCM Sterenborg

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Ann Sandison

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Irving J Bigio

O2 The clinical application of elastic scattering spectroscopy in the head and neck
Colin Hopper

O3 Fluorescence spectroscopy and fluorescence imaging for tissue diagnostics - principles and methods
Herbert Stepp et al

O4 Diagnosis of head & neck malignancy using fluorescence spectroscopy and imaging
Christian Stephan Betz et al

O5 Optical coherence tomography: challenge and opportunity
Zhongping Chen

O6 The clinical application of optical coherence tomography in the head and neck
Brian JF Wong

O7 Differential pathlength spectroscopy for diagnosis of head and neck cancer
Henricus JCM Sterenborg et al

O8 Raman spectroscopy in clinical diagnosis of head & neck pathology
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O9 Role of histopathologic and phenotypic assessment in the development and validation of optical diagnostic devices for head and neck mucosal lesions
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O14 Characterization of laryngeal carcinoma by confocal endomicroscopy
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O15 Early experience with in-vivo optical coherence tomography for differentiating lesions of the upper aerodigestive tract
Christian Stephan Betz et al

O16 Immediate ex-vivo optical coherence tomography of suspicious oral lesions
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O17 Qualitative diagnostics of oral mucosa by means of multiple fluorophore analysis
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O18 Fluorescence kinetics of Foscan, Fospeg and Foslip in the window-chamber model
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Waseem Jerjes et al

P2 Optical coherence tomography in the diagnosis of oral dysplasia
Syeda Amna Azim et al

P3 Fluorescence spectroscopy in the detection of oral dysplasia
Iordanis Toursounidis et al

P4 Raman spectroscopy and oral cancer
Nasser Alqhtani et al

P5 The clinical application of elastic scattering spectroscopy
Adel Alenazi et al

Editors-in-Chief
Adel El-Naggar
Colin Hopper
Waseem Jerjes
Tahwinder Upile

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P6 Developing fluorescent, tumour-specific “smart probes”: Transketolase-like I (TKTL1) expression and function in primary carcinomas of the head and neck

Diana Hartmannsberger et al

P7 Spectroscopic evaluation of QDs encapsulated with a novel biocompatible polymer for cancer diagnosis

Elnaz Yaghini et al

P8 Treatment of Kimura disease with photodynamic therapy: A case report

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P9 Photodynamic therapy in the treatment of recurrent nasopharyngeal cancer

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P10 Ultrasound guided interstitial photodynamic therapy of deep seated lesions

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P12 Subglottic carcinoma effectively treated with surgery and adjuvant photodynamic therapy

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P13 Investigation of photochemical internalisation in HN5 head and neck carcinoma cells and in an *in vivo* rat model

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P14 Integrin $\alpha\text{v}\beta\text{6}$ promotes TGF- β1 -dependent myofibroblastic transdifferentiation in oral submucous fibrosis

Karwan A Moutasim et al

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Tahwinder Upile et al

P16 The use of specific anti-growth factor antibodies to abrogate the oncological consequences of transfusion: An *in-vitro* study

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P17 Clinicopathological parameters and outcome of I15 (T1-T2) oral squamous cell carcinoma patients

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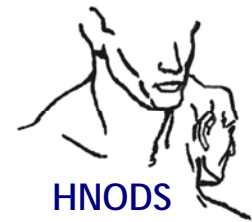
P31 How we do it: Endoscopic trans-nasal repair of CSF rhinorrhoea

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P32 Carotid artery by-pass and head and neck squamous cell carcinoma: Geneva's experience. Should we be afraid of the carotid artery?

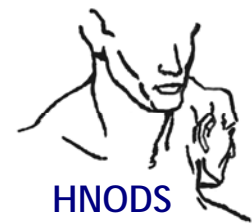
Nicolas Dulguerov et al

Programme
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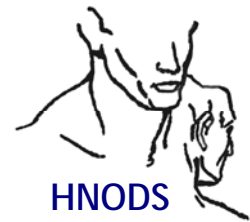


9:00-9:20	Registration
9:20-9:30	Chairman's Lecture Head & Neck Optical Diagnostics Society (HNODS)
9:30-9:50	Ann Sandison (Imperial College) Introductory lecture: "The surgical resection margin"
9:50-10:30	Session 1: Elastic Scattering Spectroscopy - Chair: Brian W Pogue
9:50-10:15	Irving Bigio (Boston University) "Elastic light scattering spectroscopy for the detection of pre-cancer: an overview"
10:15-10:30	Colin Hopper (University College London) "The clinical application of elastic scattering spectroscopy in the head and neck"
10:30-10:40	Coffee break + poster presentations
10:40-11:20	Session 2: Fluorescence Spectroscopy - Chair: Adel K El-Naggar
10:40-11:00	Herbert Stepp (University Clinic Munich) "Fluorescence spectroscopy and fluorescence imaging for tissue diagnostics - principles and methods"
11:00-11:20	Christian S Betz (Ludwig Maximilian University) "Diagnosis of head & neck malignancy using fluorescence spectroscopy and imaging"
11:20-11:30	Coffee break + poster presentations
11:30-12:10	Session 3: Optical Coherence Tomography - Chair: HJCM Sterenberg
11:30-11:50	Zhongping Chen (University of California Irvine) "Optical coherence tomography: challenge and opportunity"
11:50-12:10	Brian JF Wong (University of California Irvine) "The clinical application of optical coherence tomography in the head and neck"
12:10-12:20	Coffee break + poster presentations
12:20-1:00	Session 4: Differential Path-length Spectroscopy and Raman Spectroscopy - Chair: Ann Gillenwater
12:20-12:40	HJCM Sterenberg (Erasmus Medical Center) "Differential pathlength spectroscopy for diagnosis of head and neck cancer"
12:40-1:00	Max JH Witjes (University Medical Center Groningen) "Raman spectroscopy in clinical diagnosis of head & neck pathology"
1:00-2:00	Lunch

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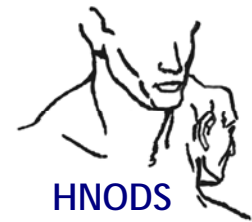


- 2:00-3:00 Session 5: Histopathology, Ploidy and Translational Imaging - Chair: Ann Sandison
- 2:00-2:20 Adel K El-Naggar (UT MD Anderson Cancer Center)
"Role of histopathologic and phenotypic assessment in the development and validation of optical diagnostic devices for head and neck mucosal lesions"
- 2:20-2:40 Marco Novelli (University College London)
"Ploidy analysis post Sudbø - where are we now?"
- 2:40-3:00 Ann Gillenwater (UT MD Anderson Cancer Center)
"Optical technologies for detection and diagnosis of oral neoplasia"
- 3:00-3:10 Coffee break + poster presentations
- 3:10-4:10 Session 6: Research papers presentation - Chair: Merrill Biel
- 3:10-3:25 Brian W. Pogue
"Spectral scatter scanning system for surgical margin detection"
- 3:25-3:40 Giorgio Tosi
"Microimaging FT-IR of Head and Neck Tumours. The case of salivary glands"
- 3:40-3:45 Muriel Abbaci
"Characterization of laryngeal carcinoma by confocal endomicroscopy"
- 3:45-3:50 Christian S Betz
"Early experience with in-vivo optical coherence tomography for differentiating lesions of the upper aerodigestive tract"
- 3:50-3:55 Zaid Hamdoon
"Immediate ex-vivo optical coherence tomography of suspicious oral lesions"
- 3:55-4:00 Christian S Betz
"Qualitative diagnostics of oral mucosa by means of multiple fluorophore analysis"
- 4:00-4:05 Sebastiaan De Visscher
"Fluorescence kinetics of Foscan, Fospeg and Foslip in the window-chamber model"
- 4:05-4:10 Yan Jiao
"Interrogation of skin pathology using elastic scattering spectroscopy"
- 4:10-4:20 Coffee break + posters presentations
- 4:20-5:20 Workshops
- 5:45-6:45 Council meeting
- 7:00-9:00 Gala dinner + awards

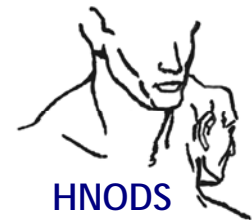


Abstracts

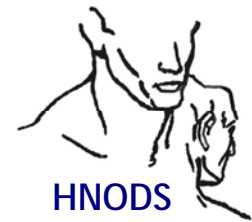
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22. Syeda Anna Azim, Tina Kumar, Tahwinder Upile, Zaid Hamdoon, Colin Hopper. Optical coherence tomography in the diagnosis of oral dysplasia.
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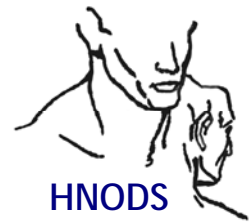


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30. Sorcha MacKay, Waseem Jerjes, Tahwinder Upile, Syedda Abbas, Zaid Hamdoon, Farai Nhembe, Shinali Patel, Priya Shah, Michael Vourvachis, Simon Morley, Colin Hopper. Ultrasound guided interstitial photodynamic therapy of deep seated lesions.
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