



# NEWSLETTER

INTERNATIONAL ORGANISATION FOR FORENSIC ODONTO-STOMATOLOGY

# Nr.4

May 2007



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## Editor's page

Dear Colleagues

I hope that all of you are well and healthy, still enjoying the dark secrets of our forensic world!

Thank you to all the member societies for your letters, comments and interesting stories. I have included most of these in the current issue of the Newsletter. I want to invite you all again to send us any news with regard to your society, court cases and mass disasters, courses in forensic odontology or personal experiences to include in our Newsletters. Even though meetings and congresses still seem to be the preferred place to meet and talk, the Newsletters are also an excellent interim medium to keep in contact with the ongoing lives of colleagues all over the globe.

A reminder about the IOFOS 2007 congress in Cape Town, South Africa is also included in this issue. Closing dates for registration and abstract submission is drawing closer and we want to urge you to send your abstracts to us as soon as possible at: [sonja.boy@up.ac.za](mailto:sonja.boy@up.ac.za). We have decided to extend the abstract submission deadline for another 2 weeks until Friday 15 June 2007.

Our President, Prof Bernitz has really been travelling the globe the past few weeks. He was invited as guest speaker at the Barbeidos meeting but urgently had to return to South Africa in order to leave for Cameroun where forensic odontologists were needed for identification of the air crash victims over there. He will give a detailed overview on this mass disaster which will be included in the next Newsletter.

Best wishes to all

Sonja C. Boy

**Editor: IOFOS**

## Presidents Page



I sincerely hope that by now most of our IOFOS members are aware of the African IOFOS meeting to be held in Cape Town from the 21 to the 23 of November. We have put together a varied program which will have something for everyone. The inclusion of lectures on wine tasting and wildlife photography are there to enhance the African flavour.

To those of you who have not yet submitted an abstract, get moving!!

I am glad to report that a very successful forensic dental meeting was held in Barbados, which was attended by dentists from around the Caribbean Islands. Judy Hinchliffe, Frank Prieels and I gave lectures and hands-on courses on many aspects of forensic dentistry. The dentists present were all keen on creating a Caribbean forensic society, which I sincerely hope will materialise in the near future. All credit must go to Victor Eastmond, who did most of the organising.

I have just returned from Douala, Cameroun, where I assisted in the identification of the Kenya Airways disaster victims. The heat, humidity and remoteness made this a taxing experience. More than 50% of the victims had dental remains which could be charted and radiographed. The new Nomad portable x-ray unit of the Department of Oral Pathology and Oral Biology University of Pretoria was used for the first time and was found to be first class for the job at hand.

See you all in Cape Town.

Herman Bernitz

**President: IOFOS**

## **From the National Societies**

### **The BAFO Silver Jubilee Conference in November 2006**

#### **Brian Chittick, BAFO**

The BAFO Silver Jubilee Meeting took place in Aylesbury on the weekend of the 10-12 November 2006. The meeting commenced with a brief welcome from President Dr John Robson. The conference then commenced with the usual format of member's afternoon on the Friday with the first session chaired by Dr Jim Hardy. The first speakers were a double act of Dr Judy Hinchcliffe and Dr John Rutherford who presented on the "Sharm el Sheik Bombing" on 25 July 2005. They managed to recollect events following the bombing from both a forensic pathological and odontological viewpoint. They outlined some of the problems encountered by undertaking an open investigation on foreign territory with limited host nation support and facilities. It was also interesting to hear John recollect how emotionally draining the inquest was in Chelmsford Coroner's court. The next speaker was Dr Graham Ritchie who presented on "Age Evaluation in the 16+ Age Group". The background to the presentation was the growing number of asylum seekers gaining entry to the UK but then lying about their ages to increase their income potential from benefits and education. Graham alluded to various studies that had been undertaken and talked about race variation and its impact on age estimation. He concluded his presentation outlining a forthcoming project to undertake research within the UK to look scientifically and objectively at age estimation within the UK asylum population. Dr Geoff Craig then presented on "Missing Anterior Teeth in Bite Marks". Geoff gave background of various international studies that had looked at the incidence of missing anterior teeth before looking at an audit that had been undertaken in the UK. The audit concluded that:

- Missing upper anterior teeth are more common than missing lowers.
- Frequency of missing upper anterior teeth is 1:10.
- Frequency of missing lower anterior teeth is 1:30.
- Canines are the least likely to be absent and their frequency of absence is 1:100.
- Missing anterior teeth is more common in the male population.

After coffee the second session was chaired by Dr Jane Reece. It commenced with Dr John Robson giving a presentation on the "Dhow Boat Disaster" which sank carrying 150 people on board with 58 fatalities. There were 15 UK bodies amongst the fatalities. John stated that there were few problems with the identification process that took place in 2 mortuaries. He did draw attention to the use of a bleaching kit/tray to ascertain AM dental

information. The tray showed missing teeth and rotations as well as fitting the deceased in the mortuary. Next to present was Dr Jaynie Weeratna on "Age Assessment in Sri Lanka". She outlined the underlying problems regarding ascertaining age for legal reasons in Sri Lanka. The requirement for legal documentation meant that individuals had to visit a forensic pathologist and odontologist prior to seeing a court judge for certification. At present they were looking at the left radius and tooth development for age estimation. Jaynie outlined the problems of using generic regression charts, which have been developed on non-Sri Lankan data. However to decrease errors they were using several regression charts coupled with ABFO methods. There is an aim to develop regression charts using Sri Lankan data. The last presentation was by Dr Paul Liddiard on "A short visit to Jersey- Spring 2007". Paul gave members a flavour for the Spring conference by describing what the Channel Islands will have to offer those who go to the Spring Conference. Member's afternoon concluded with the BAFO AGM.

Saturday's presentations focused on advances within forensic odontology and other specialities in the last 25 years to tie in with BAFO's Silver Jubilee. The first session was chaired by Dr John Robson. The programme commenced with a presentation by Dr Ian Hill on "*BAFO-Did I Do That?*" Ian described the background to the initial BAFO meeting in RAF Institute of Pathology and Tropical Medicine in RAF Halton on 24 July 1982. The next presentation had an international flavour with Professor John Clement, another founding member of BAFO, talking on "*BAFO and Forensic Dentistry 25 Years On- Has Anything Changed?*" The presentation outlined the roles of Forensic Odontology and then went on to discuss how DVI had evolved over the last 25 years to culminate in 77% of Tsunami identifications being based on dental identification. John also discussed the progress of bite mark evidence and how the development of new techniques must be matched with their admissibility in court. John continued this thread of new technologies outlining the use of CT scanners and concluded by outlining future identification issues like ethnic traits, racial groupings, DNA and prediction of an individual's characteristics. Next to speak was Dr Tony Cullen whose presentation was entitled "*The Pathological Investigation of Aviation Accidents*". The talk was underpinned by the statement that air accident pathology is a branch of preventive medicine. It then went on to describe with case examples of how autopsying the different victims of air accidents and establishing cause of death can lead to lessons learnt which may prevent future incidents.

Following a break for coffee, the next session was chaired by Dr Roger Summers. This session commenced with a presentation by Ali Williams on "*25 Years of SOCO Advances*" This very comprehensive talk took the audience through not just changes in investigating crime but also legal changes, which means that crime investigators must justify what they have done. Ali discussed fingerprinting and footwear advances as well as how

advances in scientific and biological procedures coupled with new databases were making national crime investigation more “joined-up”. New DNA techniques have also meant that more cold cases are now leading to convictions many years after the crime has been committed. Brian MacNamara then presented on the “*Terrorist Attack at the Temple of Hatshepsut in Luxor-Egypt*”. Brian outlined the background to the attack and stated that the victims had been 58 foreign nationals from different countries of which 5 were repatriated to the UK. It then became apparent that one of the UK bodies had been wrongly identified. The presentation outlined how this mistake was rectified and identified lessons learnt to prevent this happening again.

The afternoon session was chaired by Dr Geoff Craig and commenced with Dr Ian Wall who presented on “*Clinical Forensic Medicine- Past, Present and Future*”. The talk started with an overview of the Association of Forensic Physicians and its role within Forensic Medicine and how this had evolved over time. Ian then focused on traffic medicine and how this speciality was expanding to include not only drink driving but also drug related offences. He also spoke about how these could be tested for in the future. The talk then concluded with the future vision for the Association of Forensic Physicians. The penultimate presentation was given by Professor David Whittaker on “*Are Bite Marks ‘Safe’ Evidence*”. This thought provoking talk centred on the reliability of bite mark evidence and protocols that should be adhered to when analysing bite mark evidence. It also alluded to the difficulties in bite mark investigation, which was highlighted by the discussion of 2 criminal cases that went to retrial on the basis of bite mark evidence. The talk concluded with a lot of areas in bite mark analysis that will need to be investigated to swing it from a clinical opinion to a scientifically based one. The final speaker of the day was Dr Derek Clark whose presentation was titled “*Reflections on Attending Major Incidents Over 25 years*”. The talk started with Derek describing how he got involved in forensic odontology and about his first mass disaster in 1980 in Tenerife. The presentation then focused on the evolution of mass disaster protocols and technology over the years. This was then complimented by Derek’s assessment of how the acknowledgement of the utility of forensic odontology and computers had made the investigation of mass disasters easier but lack of training was still a difficulty. He also stated the need for black humour remained an important credential for any forensic odontologist! In concluding Derek alluded to the work done in the aftermath of the Tsunami and how the future organisation of mass disaster teams may be supplied.

The BAFO Silver Jubilee Gala Dinner was held that evening in the Officer’s Mess RAF Halton. The meal itself was held in the impressive Atrium of the Mess. The food was as impressive as the surroundings.



After dinner, the ceremony of the supercession of Presidents took place. John Robson stood down and Geoff Craig took over as the President.



Det.Chief. Supt Derek Stafford, Commander of the IMC in the Thailand Tsunami Operation, made the toast on behalf of the guests and toasted the health of BAFO for at least another 25 years.

**Photographs courtesy of Colonel James Hardy**

## **The International Course of Dental Identification of Human Remains from Mass Graves; Zagreb, Croatia**

### **Marin Vodanović, Croatian Association of Forensic Stomatologists (CAFS)**

*“The International Course of Dental Identification of Human Remains from Mass Graves”* took place from April 21<sup>st</sup> until April 23<sup>rd</sup> 2007. The course was organized by Croatian Association of Forensic Stomatologists (CAFS) and School of Dental Medicine University of Zagreb and was held in the amazing Museum of the Department of Forensic Medicine. About 30 participants from Sweden, Croatia and France attended the course. Although most of them were dentists, there were also some forensic pathologists, anthropologists and physicians.

The meeting started on Saturday afternoon with Zagreb sight-seeing and tasting traditional Croatian foods and drinks. Sunday and Monday were working days covering all disciplines of forensic dentistry by international and local speakers: Håkan Mörnstad, Aina Teivens, Hrvoje Brkić, Davor Strinović, Vedrana Petrovečki and Mario Šlaus. The participants were introduced with dental and non-dental methods of personal identification, organization of the identification process in mass disasters and all other procedures accompanying the work of forensic dentist. Many instructive and interesting examples of forensic work were presented including the tsunami disaster and Croatian Homeland war. There was also an opportunity to visit the DNA laboratory of the Department of Forensic Medicine and the laboratory for identification of victims of the Homeland war.



Although the work of forensic dentists is mostly connected with unhappiness and sadness we had a great time, professionally and socially.

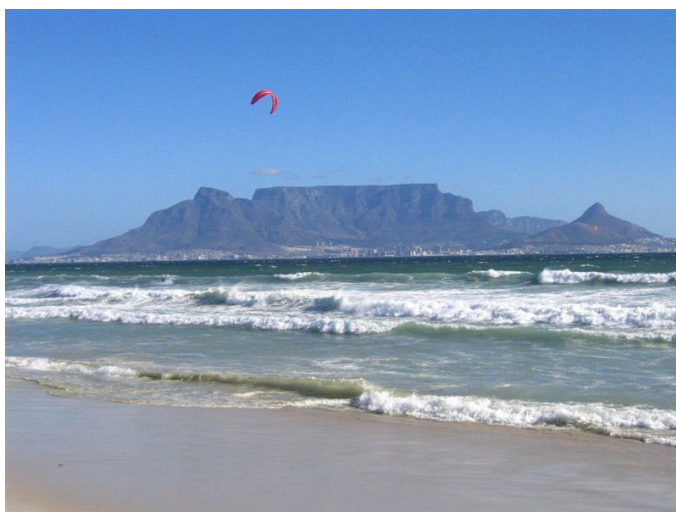
We want to thank everybody who participated in this course. It is always an amazing experience to meet new colleagues and new friends, but especially in a specific professional and

scientific field like forensic dentistry.



# IOFOS 2007 CONGRESS

**BREAKWATER LODGE  
V&A WATERFRONT  
CAPE TOWN  
SOUTH AFRICA**



**20 – 23  
November 2007**

Website: [www.IOFOS.eu](http://www.IOFOS.eu)

**Registration:**

**Registration before 31 July 2007:**

Delegates: R4000  
(440 Euro, £320, \$570, Kenyan  
Shillings  
36 000, Zim \$4 000 000)

**Registration after 31 July 2007:**

R4500

Accompanying person: R1000

**Registration Includes:**

Conference fees and venue facility  
Teas, juices, confectioneries and  
lunches during the conference period  
Tuesday evening cocktail party  
Handouts

**African Eveining:**

Thursday 22 July 2007, R350 per head.  
Experience something different!

**Account:**

African IOFOS meeting  
Account number: 62121010748  
Branch code: 270150  
Swift code: FIRNZAJJ  
Bank Address: First National Bank  
19 O.R. Tambo st.  
Middelburg  
Mpumalanga  
South Africa  
1050



(Must be transferred in SA Rand)

### **Accommodation:**

Each delegate to organise his/her own accommodation: Please see information on website.  
There are many hotels within walking distance from the conference venue

### **Abstracts:**

Please send abstracts to:

Prof SC Boy at [sonja.boy@up.ac.za](mailto:sonja.boy@up.ac.za)

#### **Oral Presentations**

Research papers  
Case studies

#### **Posters**

Research orientated  
Case studies

All abstracts must be: Arial 12. Title in capitals/ bold. Names and affiliation of author/s. Not more than 200 words. Less than 4 keywords.

**Due Date: 15 June 2007**

**Due date has been extended**



### **Keynote Speakers:**

**Bob Wood** – Forensic Radiology, Canada

**Herman Bernitz** – Bite Marks, RSA

**Maryna Steyn** – Facial reconstruction, RSA

**Alan Morris** – Physical Anthropologist, Ancient burials in Cape Town, RSA

**Theuns van der Linde** – Forensic Entomology, RSA

**Steve Naidoo** – Genocide, RSA

**Munroe Marx** – DNA, RSA

**Gert Saayman** – Ritual medicine, RSA.

## General

### Journal of Forensic Odonto-Stomatology

In the previous Newsletter it was brought to your attention that Dr Helen James recently resigned as Editor of the Journal of Forensic Odonto-Stomatology. We invited you all to nominate individuals who would be prepared to continue this huge task. We received some excellent replies and we are glad to say that the new Editor will definitely be introduced in the next Newsletter.

### Caribbean dental meeting 11- 13 May 2007, Prof H Bernitz

A course in forensic dentistry was included in this year's Caribbean dental program. Three days were dedicated to the discipline, in which lectures and hands-on courses were presented.



The lectures were given by Herman Bernitz, Frank Prieels and Judy Hinchliff (see photo on the left).

Subjects covered were: bite mark analysis, basic identification, mass disaster management, chronological age estimation and facial

reconstruction.

Police officers and members of the forensic laboratory in Barbados discussed crime scene investigation and laboratory services. A very positive response was received from the delegates who realised the importance of forensic dentistry for the first time. The Caribbean experiences cyclones, mild earthquakes and has many tourists flying in daily. It is hoped that dentists in the region will build on the foundations laid during this course.

All credit must go to Dr Victor Eastmond who did all the organising. His dedication and commitment to continuing education is to be commended. IOFOS congratulates him on a job well done.

## Interesting Cases

### Identification of an unidentified skeletal assemblage from a mass grave and its connection with the 1755 earthquake of Lisbon

Cristiana Pereira



*Lisbon, Portugal, during the great earthquake of 1 November 1755.*

In the morning of all saints day, the 1 of November 1755, the earth shook, and the world would never be the same. One of the most terrible earthquake/ tsunamis in the history of Europe struck the city of Lisbon while the people were in prayer, destroying most of the places and churches of the Terreiro do Paço, the main plaza that constituted the ruling point of Portugal's monarchy. When the aftershock's ceased and the damages counted for, the newly instituted minister of Reconstruction and Law enforcement, Sebastião de Carvalho e Melo, better know as the Marquis de Pombal, had the job of cleaning up and reconstructing the city of Lisbon in light of the other grand cities of Europe. His most famous words were delivered after being asked what to do about the disaster. He answered that "the living must be taken care of, the dead buried and the ports closed". With this, a great amount of victims were sunk into the river Tagus tied to destroyed ships. Several although, were left under

debris and were later buried in several mass graves dug up around the city in locations of previous graves to prevent the spread of diseases.

In the summer of 2004, with the 250<sup>th</sup> anniversary of the earthquake in mind, a team of archaeologists excavated the cloisters of the Academia de Ciências de Lisbon, the old Convento de Jesus, where one of the mass graves were suspected to have been placed. The excavations resulted in hundreds of human skeletal remains on top of the old friars graves. The latter presented complete skeletons while the former were reduced to several layers of commingled remains. Work on these remains started to be done by Professor Miguel Telles Antunes of the Academy of Sciences to uncover the nature of the skeletal assemblage. The current investigation that started at 2005 is a further contribution to the study of this population and concentrates on dental variables. The study consist of series of variables that were analysed and will continue to be analyse with the goal of verifying the origin of the material relative to 1755 earthquake, and concentrates on the teeth and maxilla. The variables that we propose to study include the identification of teeth, the minimum number of individuals, age determination, palaeopathological analysis, taphonomic analysis, causes and circumstances of dead including trauma and burning.