# **Call for nationwide strategy** to prevent noise induced hearing loss

Researchers and hearing care professionals at an Oticon Foundation Hearing Education Centre Symposium have called for a nationwide strategy to prevent noise induced hearing loss.

The meeting discussed initial research findings from the University of Auckland and Massey University into Noise induced Hearing Loss.

### At a glance the Symposium:

 Heard about the high noise levels associated with leisure activities like shooting and nightclubs and how, given the amount of time people participated in these activities, these were likely to contribute significantly to the hearing loss.

- Discussed that despite the significant legislation to require industries to reduce noise at the source and protect workers from the hazards of noise exposure, there was little evidence that companies, especially small ones, complied with the legislation.
- Called for an overall country-wide strategy to prevent Noise Induced Hearing Loss; one that involved industry, community engagement and that was supported by government agencies.

Read more inside.

# Grant Applications

Applications are now invited for grants in 2011 from the Oticon Foundation in New Zealand.

Funding for research and projects that aim to improve the lives of the hearing impaired in New Zealand through communication and knowledge will be considered.

Applications close 31 March 2011

Please obtain further details from: Oticon Foundation in New Zealand PO Box 9128, Te Aro, Wellington Phone 04 473 3330 Email info@oticon.org.nz

www.oticon.org.nz

# Helping the lives of the hearing impaired



This Soundscape
Newsletter is being
prepared as the ramifications
of the Christchurch
earthquake are felt across
the country. The Oticon
Foundation's thoughts are
with all those affected by

this disaster, particularly the hearing impaired in Christchurch .

As we reflect on the past 12 months, the Oticon Foundation backed work at the University of Auckland and University of Canterbury have been highlights for us. The activity is contributing to building a strong, ongoing understanding of hearing issues in our society. Balanced against this is our support of individual projects in the community touching the lives of individuals with hearing impairment.

At the Oticon Foundation we want to make sure we are supporting projects that make a really positive contribution to improving the lives of the hearing impaired. The deadline to apply for 2011 is 31 March. We encourage you to provide us with soft copies of your application. More information about how to apply is on the back of this newsletter. Please email your application to info@oticon.org.nz and send four hard copies in the mail.

A special note for Christchurch people – if you wish to apply for funding for a hearing related project and think you may have problems meeting the 31 March deadline please contact me to discuss this at kp@oticon.co.nz.

Kind regards

Karen Pullar, Secretary to Trustees

THE OTICON
FOUNDATION IN
NEW ZEALAND WAS
ESTABLISHED IN
OCTOBER 1976.

INCOME GENERATED
FROM THE FOUNDATION'S
INVESTMENTS IS
DISTRIBUTED TO GROUPS
AND ORGANISATIONS
SEEKING FINANCIAL
SUPPORT FOR
PROJECTS THAT
BENEFIT THE HEARING
IMPAIRED.

# oticon foundation hearing education centre

# Making a difference through support of research and education through universities

The Oticon Foundation flagship support includes work at both the University of Auckland and the University of Canterbury.

## **Research into hearing** loss after ear surgery one year on

round 60 people who have had Amiddle ear surgery at three hospitals in Christchurch have helped researchers at the University of Canterbury build baseline data as part of their work looking into inner ear damage following ear surgery.

Data from adults scheduled for middle ear surgery at Christchurch Hospital, St Georges Hospital and Southern Cross Hospital have been gathered as the first phase of the research looking into methods to monitor hearing and reduce hearing loss during otologic surgery (or ear micro-surgery) is completed.

"Our hypothesis was that if there was damage to the inner ear during middle-ear surgery, then there would be a post-operative drop in high-frequency hearing thresholds and also a drop in vestibular function, as shown by a decrease in the vestibular-evoked myogenic potential (VEMP), " says Dr Greg O'Beirne, Senior Lecturer in Audiology and Research Leader.

Patients sometimes report dizziness after ear surgery, and the VEMP potential is another way of measuring balance function. The goal of the first stage was to measure the extended high-frequency audiometry on patients before they have surgery, and then after their operation over a period of several months, and to measure their VEMP responses over the same period.

"It's too early to report the results of this work, but we have had several cases of patients who have had postoperative changes in

their extended high-frequency air conduction thresholds."

The team, which also includes audiologist Melissa Babbage and otolaryngologist Mr Phil Bird, is now moving to the second phase of the work - the development of an intraoperative monitoring system. Sophisticated hardware such as amplifiers and transducers have been assembled and work on the measurement software has started.

Dr O'Beirne and his team have been sharing progress with the research to interested audiences.

Visit www.oticon.org.nz for further



Recording equipment, electrode placement and gaze direction used to measure tap oVEMPs.

## WHAT'S COMING UP at the OFHEC, University of Auckland

#### OFHEC HEARING RESEARCH **SEMINARS**

The quarterly seminars are at the School of Population Health, University of Auckland Tamaki Campus, Morrin Road, Glen Innes, Auckland. Contact the Audiology Administrator (09 923 5336, audiology@auckland.ac.nz). The seminars run from 5.30-6.30pm drinks and nibbles beforehand from 5pm.

#### 11 MAY 2011

Professor Birgitta Sahlén, Department of Logopedics, Phoniatrics and Audiology, Lund University Hospital, Sweden. "Swedish children and adolescents with cochlear implants in conversation with hearing peers."

#### 20 July 2011

Brief presentations from four PhD students in auditory neuroscience on their research topics.

#### 14 September 2011

A neurologist talking on hearing and vestibular disorders seen by neurologists in their practice and the role of neurologists in the treatment of these conditions.

#### 19 October 2011

Dr David Welch, Department of Audiology, University of Auckland. "What the Dunedin Multidisciplinary Longitudinal Study has shown us about hearing loss in the population".

We will keep you up-to-date with activity at the OFHEC at www. oticon.org.nz or visit http://www. fmhs.auckland.ac.nz/soph/depts/ audiology/ofhec.aspx

### THE UNIVERSITY OF AUCKLAND

# Noise induced hearing loss in NZ – what do we know?

Over the last three years there has been a major research programme at the University of Auckland and Massey University into noise-induced hearing loss. This has been funded jointly by the Accident Compensation Corporation and the Health Research Council of New Zealand.

The annual Oticon Foundation Hearing Education Centre Spring Symposium on 29 November 2010 at the University of Auckland was an opportunity for the research groups to present the preliminary results of this research to the professional and industry communities.

Over 110 people were there to discuss the topic "Noise-induced Hearing Loss in New Zealand: what we now know?"

The University of Auckland group described its modelling approach to estimate the prevalence and

incidence of noise-induced hearing loss in New Zealand. It reported that about 18-20% of the hearing impaired population in New Zealand (about 1.8-2% of the total population) have a hearing loss from noise exposure and this is dominated by occupational noise-induced deafness.

The Auckland researchers also showed that the hearing loss was dominated by high noise industries such as manufacturing, construction, agriculture and mining, with very little evidence of hearing loss in less noisy industries like education and retail.

Together with Dr Warwick Williams, from the National Acoustics
Laboratory in Sydney the researchers also described the high noise levels associated with leisure activities like shooting and nightclubs and how, given the amount of time people

participated in these activities, these were likely to contribute significantly to the hearing loss.

The group from Massey University showed that while there was significant legislation to require industries to reduce noise at the source and protect workers from the hazards of noise exposure, there was little evidence that companies, especially small ones, complied with the legislation.

Discussions around interventions detailed the need for substantial management involvement and support and a focus on engineering controls rather than personal hearing protection.

The final session of the meeting was a call for a national strategy to prevent NIHL; one that involved industry as well as community engagement and was supported by government agencies.

# International experience helps new audiologists with customer focus

Sleeping out in tents in the middle of Denmark with 60 other young people might sound like a Contiki tour or an authentic Kiwi OE adventure.

But for a couple of young local audiologists it was a professional development experience funded by the Oticon Foundation that had them rubbing shoulders with colleagues from around the world.

Audiologists Lisa Burr and Melanie McKenzie took part in the Oticon Summer Camp getting an introduction to the Eriksholm Research Centre, discovering different ways to counsel patients and tips and hints for providing a client focused service.

"Learning about the intricacies of hearing aid technology was a real eye-opener," says Lisa. "Talking to other audiologists and audiology students from other nations was also interesting and made me think New Zealand provides a good service and funding for hearing aids."



The pair took part in team building exercises requiring them to inject a bit of national flavour. This took the form of activity with pineapple lumps, jaffas and a poi dance.

The Oticon Foundation believes the summer camp opportunity provides young New Zealand audiologists with exposure to the profession internationally and to widens their learning and audiological horizons.



# How to apply for grants

#### **Applications must include:**

- 1. The name and address of applicant
- If relevant, the organisation represented and position of applicant within the organisation, plus copies of latest balance sheet and annual report
- 3. Details of expenditure involved
- Information about funding you are seeking from any other organisation for this or supplementary projects
- Overseas travel details where applicable. Please state whether an applicant/s will be returning to New Zealand permanently after the visit is completed
- How the hearing impaired in New Zealand will benefit from your project/research
- Information about how you will publicise your project and its results. (We would like you to seek as wide an audience as possible)
- Details about how you will promote the Oticon Foundation if your application is successful

# Applicants applying for project funding should also include:

- 1. Title of project
- Summary of project (not exceeding 150 words)
- 3. Qualifications of applicant relevant to project
- Aims and design of project, and expected completion date

# Applications for grants other than project funding should also include:

- 1. Details of grant requested
- 2. Reasons for request

# Successful applicants will be required to:

- Submit a report (five copies) within three months of completion of the project
- Disseminate results or information from the project to as wide an audience as possible, such as to the bulletins and newsletters of professional groups, hearing impaired and Deaf groups
- Acknowledge the Oticon
   Foundation in any reports or publications about your project/research

# deadline

Grants are allocated annually.

Applications (an electronic copy (Word or PDF) and four hard copies) should be made no later than 31 March in any year.

Applicants will be notified whether their grant application has been accepted by 30 June of the same year.

Please address applications to:

The Secretary
Oticon Foundation in New Zealand
C/- PO Box 9128, Te Aro
WELLINGTON 6141
Phone: 0800 OTICON
E-mail: info@oticon.org.nz

www.oticon.org.nz

# Oticon Foundation 2010 grant recipients

#### **BLUE LAGOON CHARITABLE**

**TRUST,** NZSL interpreting at Tauranga Hearing Expo

**KELSON DEAF EDUCATION CENTRE,** ICED conference,
Vancouver

**LISA BURR AND MELANIE MCKENIZE**, Eriksholm Summer
Camp

**SPECIAL OLYMPICS NZ**, for statistical software

**UNIVERSITY OF AUCKLAND AUDIOLOGY PRIZE**, annual prize for academic work

#### UNIVERSITY OF AUCKLAND,

ongoing funding for Oticon Foundation Hearing Research Centre

#### **UNIVERSITY OF CANTERBURY**

(Greg O'Beirne and Mr Phil Bird), research into prevention of hearing loss during otologic surgery

**UNIVERSITY OF OTAGO MEDICAL SCHOOL**, summer research scholarships funding