# soundscape

NEWSLETTER OF THE OTICON FOUNDATION IN NEW ZEALAND



#### The Tui Billboard of Hearing

t's the over 65 year olds who've got the problem with hearing impairment and hearing loss. That statement needs to go with the response similar to a Tui's Billboard – Yeah Right.

Yes older people do suffer from hearing loss disproportionately to younger New Zealanders, but half the New Zealanders with hearing loss are under 65. Further, whole generations of Kiwis are placing themselves at risk of damage to their hearing and ongoing hearing loss because of how we work and socialise today.

Hearing care professionals, health care workers and decision makers are realising that we need to start early with early detection and intervention for newborns, and education of our young people to reduce the impact and incidence of hearing loss.

The Oticon Foundation is supporting a wide range of work which should have an impact on the lives of New Zealanders of all ages. The Newborn Screening programme is a case in point. During Deaf Awareness Week (22-28 September) we will be promoting and supporting activity to highlight issues and projects around hearing impairment across all ages and all New Zealanders.

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.

SEPTEMBER 2008

# foundation

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# Learning the Lessons on Newborn Hearing Screening

ocal audiologists, doctors and health officials have received a strong message about what needs to be done to ensure our newborn hearing screening programme is a success.

Professor Martyn Hyde from the University of Toronto, Canada has made a plea to New Zealand to ensure there is consistent and ongoing follow up of the newborn once hearing impairment has been detected.

The Oticon Foundation supported Professor Hyde as the keynote speaker at the recent New Zealand Audiological Society national conference in Christchurch.

"We know that if a child receives a hearing aid or cochlear implant early they can develop relatively normal spoken language and literacy and improved socialisation," says Professor Hyde.

"One major issue we are dealing with in Canada is ensuring the newborn gets appropriate, consistent follow up once they have been screened.

"It's crucial that they don't drop out of the system."

Professor Hyde told audiologists that having a seamless chain of care, the right information and ongoing engagement with parents are key to a successful newborn screening programme.

He has urged the New Zealand audiology profession, physicians, hospital and health officials to ensure their ongoing support and involvement is locked in as part of the screening programme. The Oticon Foundation supported NZAS bringing Professor Hyde to New Zealand because of his valuable insights and learnings that he was prepared to share with audiologists and the hearing care profession here.





# Tongan and Samoan resources for children with hearing aids and their families

The Oticon Foundation has produced versions of Your Hearing Aids booklet for children in Samoan and Tongan. These translations are in addition to an earlier version produced in te reo Māori.

The booklets contain tips and hints for children and parents about how to use and look after their hearing aids.

If you, your clinic or organisations would like copies of this booklet please contact us on info@oticon.org.nz.



# Is going to the gym bad for your hearing?

Some of us need excuses to avoid the gym! A research project supported by the Oticon Foundation might just give us some insights into whether regular attendance in aerobic classes can damage your hearing.

More than 30 gym goers have had their hearing monitored and tested over a one month

period thanks to the research by Eyal Goel and Dr. Emily Lin of the University of Canterbury.

Participants are healthy normal hearing adults (18-50 years old) with no history of ear disease or ear pathology. Some of them are frequent-goers to aerobics classes while others are non-frequent goers.

"We have been using puretone audiometry (PTA) and Distortion Products Otoacoustic Emissions (DPOAEs) to test the hearing of participants pre and post attendance in an aerobic class," says Eyal.

"We have classified the different classes to 'low-risk classes' and 'high-risk classes' for comparison. However, it is noteworthy that in some of the gyms sampled we have experienced Hawthorne effect. In other words, instructors became aware of our research and turned the volume down.

"We've also noticed very early signs of increasing awareness to the risks of noise during aerobic classes. For example, one of the five gyms included in the study provided earplugs to participants in aerobic classes. Those were available free of charge in the gym's reception desk.

Now that most of the data has been gathered, the team is preparing for the statistical analysis of the results and the interpretation of their significance. As soon as the analysis is completed, Eyal and Emily will be able to determine whether DPOAEs can be used as a tool for early detection of noise induced hearing loss which is not detected by a normal PTA test.

We'll keep you posted with the results in the next edition of *Soundscapes*.

#### Gyms tested for their acoustics

The research included an acoustic analysis of gyms in Christchurch.

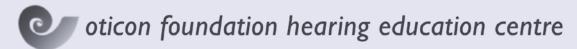
"It appears that aerobic classes vary greatly in sound pressure levels, ranging from 68.4 dB(A) to 100.1 dB(A). This is based on sound measurements recorded from five gyms in Christchurch," says Eyal. The sound pressure level and the noise dose of 87 aerobic classes have been measured using a noise dosimeter. The acoustics of one gym has also been analysed, including measures of reverberation time.

### For your diaries – The 2009 Spring Symposium

Mark your diaries for the University of Auckland's Oticon Foundation Hearing Education Centre Spring Seminars.

Next year's Oticon Foundation Hearing Education Centre Spring Symposium is on Tinnitus and its management and will be held in Auckland (at the Maritime Museum) on 11-12 September 2009.





# Spring Symposium on Newborn Screening and Early Intervention



bout 140 hearing and health care professionals and parents of deaf children recently turned out for the annual Spring Symposium at the University of Auckland.

This focus on Early Intervention for Children with Hearing Loss was very timely given the planning and imminent roll-out of the Newborn Hearing Screening and Early Intervention programme.

Keynote speaker **Dr Arlene Stredler Brown**, from the University of Colorado gave insights into the need for informed choice in the selection of communication approaches, her experience with family-centred early intervention and the nature of the newborn population. This

includes the need to consider children with minimal hearing losses (an issue of concern as these are not detected through the screening programme), those from non-English backgrounds and those with auditory neuropathy/disynchrony.

**Dr Nina Sawicki** from Wellington, who is a parent of a deaf child fitted with bilateral cochlear implants, spoke about her research with parents of children with cochlear implants. She gave some fascinating insights into the attitudes and experiences of parents as their children had their hearing loss identified and were then fitted with the cochlear implant.

**Dr Stredler Brown** is continuing her contribution with a workshop for early interventionists and a meeting with the National Screening Unit and Ministry of Education about monitoring and evaluating outcomes for Newborn Hearing Screening and early intervention.



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## Oticon Foundation Hearing Education Centre – Update Report

#### Quarterly Hearing Research Seminars

The Oticon Foundation Hearing Education Centre in the School of Population Health at the University of Auckland has run four seminars as part of its quarterly evening Hearing Research Seminar series.

- Dr Linda Hand, from the Discipline of Speech Sciences at the University of Auckland on client-professional communication.
- Professor Dianne Van Tassell,
   Department of Speech, Language and Hearing Sciences, University

of Arizona, USA on acoustical characteristics of open-fit hearing aids.

- Dr Fabiana Kubke, from the
  Department of Anatomy with
  Radiology at the University of
  Auckland on her fascinating research
  into auditory system of birds and
  how this can inform us about neural
  pathways involved in language
  development.
- More recently Professor Paul Smith from the University of Otago on the role of the Vestibular system in spatial memory and the interesting interactions with the hippocampus in the brain, the important brain structure in the formation of memory.



#### Project HIEDI – Oticon Foundation commitment helps with ongoing work

The Foundation believes the work done by Project HIEDI is crucial to the development and ongoing implementation of a newborn screening programme in New Zealand.

Our support is helping team members to take an active role in planning, reviewing and assessing key steps in the Newborn Screening implementation. This includes workforce planning and project member Janet Digby becoming a member of the Australasian Screening Committee. This provides a great opportunity to share information and knowledge with Australian programme managers and professionals.

#### Oticon Foundation grant recipients 2008

#### NEW ZEALAND AUDIOLOGICAL SOCIETY,

for Dr Martyn Hyde, Keynote speaker, 2008 NZAS Conference

#### UNIVERSITY OF

AUCKLAND, for Dr Dianne Van Tasell, Erskine Scholar at Canterbury, to speak in Auckland

#### **ROTORUA HOSPITAL**

(Kirsty Gerlach), for a newsletter for families of hearing impaired children

#### NATIONAL HEARING ASSOCIATION, to produce an information data base and information packs

PROJECT HIEDI, ongoing funding for implementation of Newborn Hearing Screening and early intervention programme in New Zealand

#### AUCKLAND PARENTS OF DEAF CHILDREN, for portable sound system

KELSTON DEAF EDUCATION, for portable sound systems

#### UNIVERSITY OF CANTERBURY (Eyal

Goel), for research to monitor potential noise induced hearing loss in gyms

#### **DENISE POWELL** For Doctoral research

PROJECT HIEDI, for project manager to attend Como Conference on Newborn Hearing Screening

#### UNIVERSITY OF AUCKLAND, ongoing funding for Oticon Foundation Hearing Research Centre

#### INGRID DEKKER, travel grant to attend Summer Camp for young audiologists in Denmark

CLAIR DWYER, travel grant to attend Summer Camp for young Audiologists in Denmark

#### GEMMA WHITEHEAD,

University of Auckland Oticon prize for Best Original and Outstanding Dissertation

#### how to apply for grants

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

- I. 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
- 4. 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
- 6. 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)
- 8. Details about how you will promote the Oticon Foundation if your application is successful

#### Applicants applying for project funding should also include:

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

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

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

#### Successful applicants will be required to:

- 1. 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 (together with five extra 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** 

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WELLINGTON

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