soundscape

SEPTEMBER 2001

NEWSLETTER OF THE OTICON FOUNDATION IN NEW ZEALAND

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

INCOME GENERATED FROM THE SALE OF OTICON PRODUCTS IS DISTRIBUTED THROUGH THE FOUNDATION TO GROUPS AND ORGANISATIONS SEEKING FINANCIAL SUPPORT FOR PROJECTS THAT BENEFIT THE HEARING IMPAIRED.

$120,000 IN GRANTS TO HEARING LOSS PROJECTS

Improving classroom acoustics, supporting specialist training and furthering research into hearing issues are just a few of the projects that have received funding from the Oticon Foundation in 2001.

Thirty-one projects benefiting the lives of the hearing impaired in New Zealand have received funding from the Oticon Foundation. The standard of grant proposals we have received this year has been impressive and this has resulted in the Foundation increasing its grant allocation to $120,000. The increased allocation is nearly double the amount given out last year.

We are proud to be involved with research into hearing loss. Our aim has always been to fund projects that increase awareness and knowledge about hearing loss to improve the quality of life for hearing impaired people and their families.

The Oticon Foundation in New Zealand has a 25-year history of sponsoring research in New Zealand and the visits of researchers to New Zealand.

We are supporting events and projects that will enhance the exchange of information and ideas.

The Oticon Foundation has also given grants to support the training and education of hearing care professionals and community groups that work with the hearing impaired. A full list of the successful grant applicants is included with this newsletter. The deadline for new applications is 31 March 2002.

Karen Pullar, Secretary to the Trustees

Silent World Theatre leaves its mark

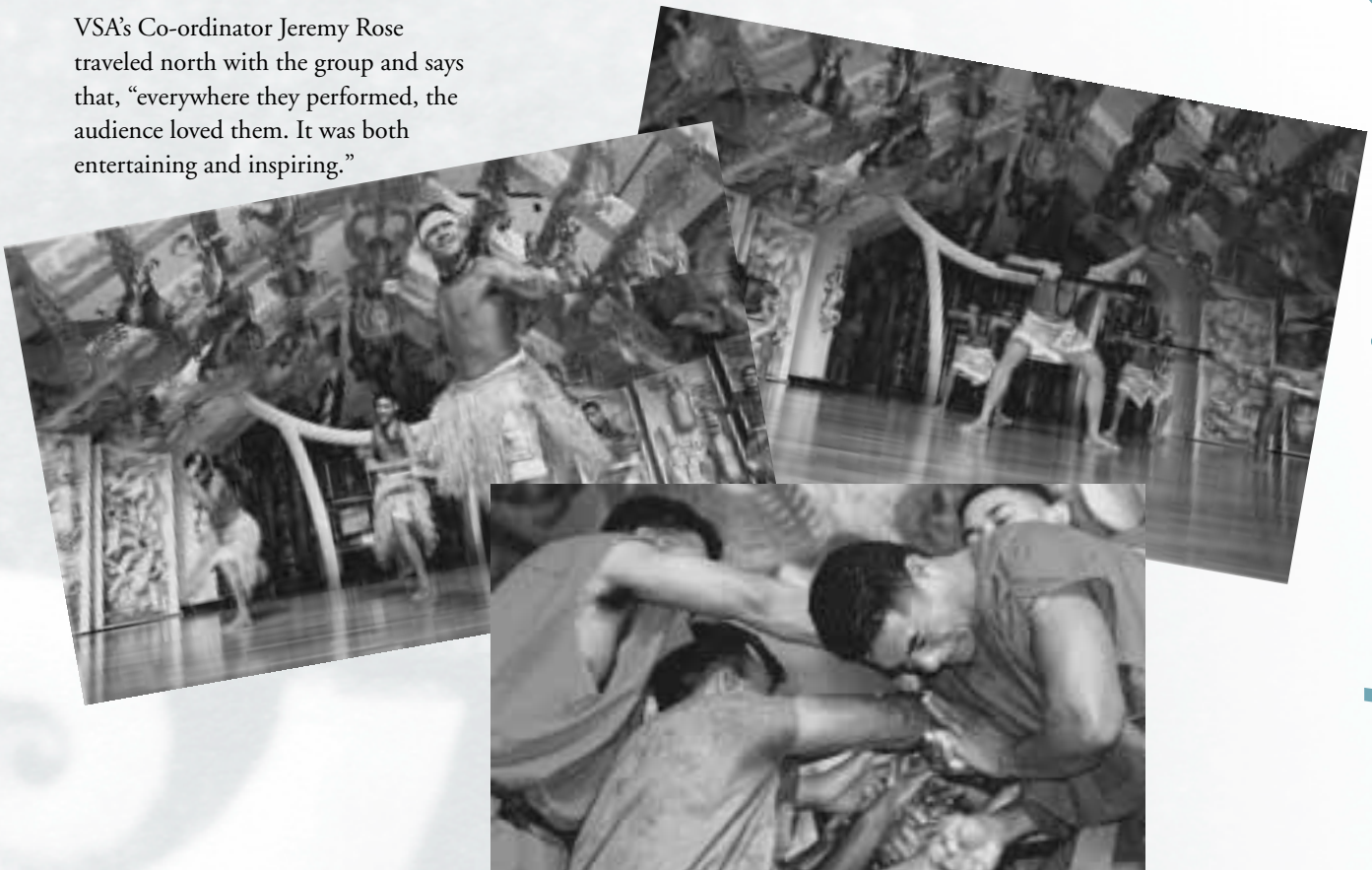
The visit of Samoa's Silent World Theatre to New Zealand in May this year, was an outstanding success, says VSA organisers. Sponsored by The Oticon Foundation, the critically acclaimed theatre company, made up of 12 deaf students at Apia's Lotto Taumafai Education Centre for the Disabled, performed in Auckland, Hamilton, Wellington, Christchurch and Nelson.

VSA's Co-ordinator Jeremy Rose traveled north with the group and says that, "everywhere they performed, the audience loved them. It was both entertaining and inspiring."

Loto Taumafai's principal is a VSA volunteer Peter West, a teacher with more than 30 years experience of working with children with disabilities. He says the Silent World Theatre has done more to convince ordinary Samoans of the potential for people with disabilities to play a meaningful role in society than any number of public relation campaigns.

The theatre's programme included traditional Samoan legends and dances and skits on contemporary Samoan life.

The theatre company came to New Zealand during VSA Week, 14 – 20 May. This year VSA's theme was Disability and Development. VSA branches around the country organised displays, talks and documentary screenings.



the oticon foundation

Top audiology students win Oticon Foundation award

Michelle Nazzer (above)

Diem Mai

Arriving in Invercargill in 1981, little did 4 year old Vietnamese refuge Diem Mai think that 20 years later she would be winning a prize for her Masters of Audiology Thesis, along with co-winner Michelle Nazzer.

At a recent function at Auckland University Diem Mai, now from Mt Roskill, was presented with The Oticon Foundation prize for the best dissertation. Diem's research was on the identification of the calcium-activated channels in the cochlea.

Diem's research focused on the large conductance calcium-activated potassium channels found in a wide range of tissues. In lower vertebrates studies have indicated that they may contribute to the tonotopic tuning of sound transduction in the cochlea. However, in the mammalian cochlea their significance is not yet known.

Diem's research raises questions about whether conductance calcium-activated potassium channels contribute to the frequency tuning of the cochlea. Her knowledge will be put to good use at Auckland Healthcare, where she helps run a hearing treatment and rehabilitation programme.

Delighted to win The Oticon Foundation award, Diem says "This is a real commitment to both the education of newly graduated Audiologists and the importance of research in clinical training."

Michelle Nazzer was awarded the Oticon Prize for her research dissertation on the protection of the cochlea from damage caused by lack of blood flow, as may occur during surgery on the inner ear. Her research work has provided exciting preliminary data to show that the damage to the cochlea can be reduced by lowering the temperature of the inner ear during oxygen deprivation. This work is continuing, but demonstrates the practical potential to protect the ear and reduce hearing loss during surgery. Michelle is now a Senior Audiologist at Waikato Hospital.

The Oticon Foundation Chairman, Tim Olphert says "The Oticon Foundation has been involved with the Masters of Audiology programme since it began in 1990. In 1991 we sponsored the first prize for the best student dissertation."

The Master of Audiology degree at the University of Auckland is the only programme offered in New Zealand for people to obtain the necessary qualifications to practice as an Audiologist in New Zealand. It involves two years of research-based postgraduate study in the hearing sciences, hearing assessment in adults and children and hearing aid fitting.

Associate Professor of Audiology and Auckland Medical School Head of Biomedical Science, Dr Peter Thorne says that, "To date there have been about 80 graduates from the programme who are now working as audiologists throughout the country and overseas."

Students are exposed to research through their interaction with staff from the Discipline of Audiology and Division of Physiology at the University of Auckland and staff at the Audiology Departments of the Auckland District Health Board, including Starship Hospital and the National Audiology Centre.

During Deaf Awareness week

The Oticon Foundation is proud to support the following publications, which are helping to raise the public awareness of hearing issue.

- The updating of the National Federation for the Deaf booklet Sound Advice. Copies can be obtained from National Foundation for Deaf.
- The classroom and acoustics brochure on Sound Fields. Copies can be obtained from the Oticon Foundation

New frontiers in treatment of ge

Identifying the genes causing hereditary hearing loss has been the work of US-based Professor Bronya Keats for the past few years.

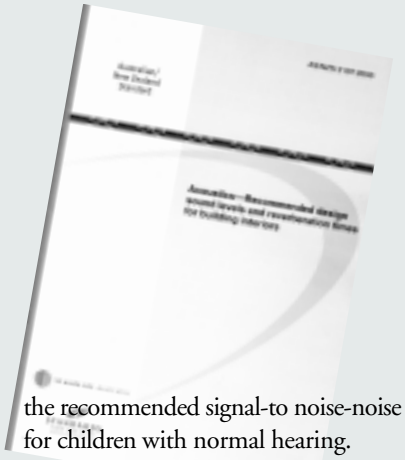
Australian-born Professor Keats visited New Zealand recently to present her research findings to the New Zealand Audiological Society (NZAS) conference in Christchurch. Her attendance was made possible by an Oticon Foundation grant to the NZAS.

Dr Keats is the Head of the Department of Genetics and Director of the Molecular and Human Genetics Centre of Excellence at Louisiana State. She is a Fellow of the American College of Medical Genetics and a Diplomate of the American Board of Medical Genetics with certification in clinical molecular genetics. Dr Keats is also a member of the Kresge Hearing Research Laboratory.

Dr Keats is a member of the Human Genome Project. This is an international consortium of scientific organisations that completed the first draft sequence of the human genome in 2000 and is now dedicated to analysing that sequence.

Dr Keats's research shows that routine molecular diagnostic testing for many of the genes causing hearing loss is likely to be available within the next few years.

Research sponsored by Oticon results in new building standard



Results of the Classroom Acoustics research have led to minimum standards for classrooms being included in the joint Australian/New Zealand Building Standard for the first time.

The title of the standard is Acoustics – Recommended design sound levels and reverberation times for building interiors and has the code AS/NZS 2107:2000

The Standard recommends design criteria for conditions affecting the acoustic environment within the classroom. It is intended for use by architects of new and existing buildings. Design considerations include the selection and assessment of:

- Building materials and services used in these spaces;
- Building components that exclude noise external to the building e.g. traffic noise, industrial noise; and
- Building components that exclude noise within the building e.g. building services noise

Methods of measuring the ambient sound level and reverberation time in occupied spaces are specified

Early Classroom Acoustic research indicators confirm that our classrooms are too noisy and make poor listening environments for even those with good hearing. This is supported by 1994 research published in the New Zealand Medical Journal, which showed that only 4% of 106 junior classrooms tested in Wellington, met the recommended signal-to noise-noise ratio for children with normal hearing.

Oriole Wilson the project co-ordinator says "It is fantastic to have teaching spaces included in this standard. We now have unoccupied noise levels and reverberation times specified that can help lead to very good acoustic conditions. There is also a special mention of the need for additional acoustic consideration for younger children and those with learning difficulties such as the hearing imparied and students with English as a second language."

Hearing House children benefit from SoundField

A pre-school facility for hearing impaired children has a FM Sound Field thanks to a grant from The Oticon Foundation. Auckland's Hearing House is a purpose-built acoustically enhanced early intervention centre for children with hearing impairment who are integrated with local community children.

Sessions commenced in November last year with each session consisting of 15 children, 4/5 of these children having a hearing impairment. Education Programme Manager Jim Casey says, "We couldn't do without the Sound Field as it provides a clear signal that all children can access. We also use this system for training purposes. The system was easy to set up and for staff to maintain. It is invaluable to us."

netic hearing loss

"Identification of the genes for hearing loss also provides an important step towards understanding the molecular mechanism of hearing. Research is providing insight into the function of the proteins encoded by these genes, and as a consequence, understanding of the auditory system is advanced. The goal, which is to characterise all of the genetic and non-genetic factors that play a role in hearing loss, and to determine the interactions among them, is within reach."

"Over the past 10 years, amazing progress has been made in our knowledge of the human genome and many of the 30,000 genes it contains. So far, more than 100 genes have been shown to be associated with hearing loss. These genes follow autosomal dominant and recessive as well as X-linked and mitochondrial patterns of inheritance."

"If the hearing loss is one of several clinical findings, the disorder is called a syndrome. Over 300 such syndromes have been described. They include Waardenburg, Stickler, Pendred, Jervell and Lange-Nielsen, Usher, Alport, MELAS and MERRF. Genes for these syndromes have been identified and the functions of the proteins they encode are being studied. In several cases, more than one gene is

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Oticon Foundation Grant Recipients 2001

DR ANNE GREVILLE – for research on the incidence of Hearing Impairment in New Zealand

CARTER OBSERVATORY – Audio Loop Amplification Systems for Planetarium and Seminar Rooms

DEAF ASSOCIATION OF NZ – Travel Grant for CEO to attend Deaf Odyssey Conference in Perth

DEAF ASSOCIATION OF NZ, MANAWATU – for workshops for the Deaf on women's health issues.

FOXTON AREA COMMUNITY MEDICAL TRUST – FM Sound Field Amplification System

HEARING ASSOCIATION, MANAWATU – Audiometer

HEARING ASSOCIATION, NELSON – Audiometer

HEARING ASSOCIATION, TIMARU – hearing aid maintenance kits for Timaru Rest Homes

JILL MUSTARD, TEACHER OF THE DEAF – Study Grant – Master of Deaf Education

JANET WILSON, TEACHER OF THE DEAF – Study Grant – Master of Deaf Education

JOHN WOOD, ADVISER ON DEAF CHILDREN – Study Grant – Master of Educational Psychology

JOY ALLCOCK, OCCUPATIONAL THERAPIST – portable FM Sound Field Amplification System for demonstration

KATHY BRUCE, TEACHER OF THE DEAF – Study Grant – Master of Deaf Education

LOUELLA NEALLE – for Sharon Grassick, keynote speaker at workshops in Auckland, Wellington and Christchurch

MASSEY UNIVERSITY – Sign Language interpreters for DisAbility in Education Conference

MT ROSKILL PRIMARY SCHOOL ENDEAVOUR CENTRE – FM Sound Field Amplification System

NATIONAL FEDERATION FOR THE DEAF – for the reprint of Sound Advice

NEW ZEALAND AUDIOLOGICAL SOCIETY – for Dr Bronya Keats, Professor of Genetics, Louisiana State University – keynote speaker at 2001 NZAS conference

NEW ZEALAND PHYSIOLOGICAL SOCIETY – funding for speakers at Auditory Function and Dysfunction Symposium

OTICON NZ – Audiology Camp for recent audiology graduates

OTICON NZ – Travel grant to bring expert on Classroom acoustics to New Zealand

RAUMANGA PRIMARY SCHOOL WHANGAREI – FM Sound Field Amplification System

SIGN LANGUAGE INTERPRETERS ASSOCIATION OF NZ – Funding for National Convention

SPECIAL EDUCATION SERVICES, TAI TOKERAU –Project raising awareness of benefits of classroom amplification in Tai Tokerau schools

THE HEARING HOUSE – FM Sound Field Amplification System

UNIVERSITY OF CANTERBURY for workshops for trainee teachers throughout New Zealand on classroom acoustics and amplification strategies

VAL SMITH, ADVISER ON DEAF CHILDREN – Study Grant – Master of Deaf Education

VAN ASCH DEAF EDUCATION CENTRE – for Christina Perigoe, Keynote Speaker at Auditory-Verbal Therapy Workshop and Parent's Education Forum

VAN ASCH DEAF EDUCATION CENTRE – to make a film with students of Van Asch

VAN ASCH DEAF EDUCATION CENTRE (DAPHNE RICKSON) – to produce a Music Therapy CD for Deaf and hearing impaired children

VOLUNTEER SERVICES ABROAD: supporting the Deaf performers from Apia, Samoa 'Silent World Theatre" nation-wide tour.

New Frontiers in Treatment of Genetic Hearing Loss

continued

associated with the same syndrome. For example, there are at least nine genes for Usher syndrome."

Audiologist and Secretary to the Oticon Foundation, Karen Pullar says Professor Keats' gene research is particularly exciting. "Congenital hearing loss is caused by genetic reasons in 60% of cases. Identifying these genes will mean more accurate diagnosis, more effective management, and possibly, early intervention for children who have genetic hearing loss," said Ms Pullar.

While in New Zealand, Professor Keats also presented the Oticon Foundation awards, to two students from the University of Auckland's Master of Audiology degree at a function at the Auckland Medical School.

how to apply for grants

Applications must include:

1. The name and address of applicant
2. 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
5. Overseas travel details where applicable. Please state whether 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
7. 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:

1. 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:

1. 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
2. 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
3. Acknowledge the Oticon Foundation in any reports or publications about your project/ research

deadline

Grants are allocated annually.

Applications (together with four extra copies) should be made no later than 31 March in any year to:

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