



MEDIA STATEMENT

18 April 2006

World first research to speed up cure for ear infections

Fast tracking the healing process for common ear infections will be the focus of ground-breaking research by WA's Lions Ear and Hearing Institute (LEHI).

The research will aim to understand why some eardrums heal by themselves (and why some do not heal at all) by identifying which genes are responsible for the wound-healing process of an infected human ear drum.

According to the World Health Organisation, almost half of the world's population suffers from 'chronic otitis media' – more commonly known as an ear infection – which causes hearing loss and can lead to more serious disorders such as meningitis.

Ear infections can occur when ear drums burst as a result of a loud explosion, trauma or most commonly by infection spread by a common cold or sore throat.

LEHI's Senior Research Scientist Dr Reza Ghassemifar, said he was looking forward to starting the three-year research project after securing a \$238,600 grant from the Garnett Passe and Rodney William Memorial Foundation.

"With this funding we can start our studies to understand how wounds in ear drums heal themselves by examining the cells and molecules in the replacement tissue," Dr Ghassemifar said.

"Through DNA or gene profiling of animal models we hope to learn which molecules are active as the ear drum heals and we will then target those to speed up the healing process."

Dr Ghassemifar said the clinical research into the wound healing process was a major milestone towards LEHI's major tissue engineering project of growing a replacement human ear drum.

"If we can understand how an ear drum heals itself we can help clinicians identify new techniques to speed up the healing process for sufferers of ear infections.

“Ear infections are a major worldwide health problem and it is common for an average person to take up to 10 years before they receive medical treatment.

“We tend to ignore ear infections thinking they will go away or we might have a reluctance to visit the doctor – but in third-world countries the problem is common due to the lack of available treatment,” he said.

Dr Ghassemifar said the results of other gene targeting research have indicated that gene therapy (to target wound healing genes) could prevent wound scarring and be potentially applied to clinical scar treatments.

Professor Marcus Atlas, Director of LEHI, said that Dr Ghassemifar’s work in LEHI’s Tissue Engineering Laboratory is potentially ground breaking.

“Chronic otitis media is a major problem throughout the world and particularly affects the indigenous Australian population. These studies have the potential to help greatly”, Professor Atlas said.

END

ALL MEDIA INQUIRIES:

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Photo, interview and film opportunities

There are opportunities to interview, film and photograph LEHI’s Senior Research Scientist Dr Reza Ghassemifar and his PHD students and high-tech ear and hearing equipment at LEHI’s laboratories in Nedlands.

About Lions Ear and Hearing Institute

The Lions Ear and Hearing Institute (LEHI) is a not for profit organisation that was established in 2001 and is a leader in research, ear surgery, audiology and hearing restoration in Western Australia.

The vision and focus provided by the specialised team at the Lions Ear and Hearing Institute has resulted in groundbreaking medical advancements in surgical techniques and the diagnosis and management of ear and hearing disorders.

For more information visit www.lehi.com.au