

UNIVERSAL NEWBORN HEARING SCREENING (UNHS)

China visit 21 – 28 April 2024

Co-chaired by Professor Catherine McMahon, Chair, AHH Education and Practice Committee, and Professor Greg Leigh AO, Chair, Australasian Newborn Hearing Screening Committee

SUMMARY

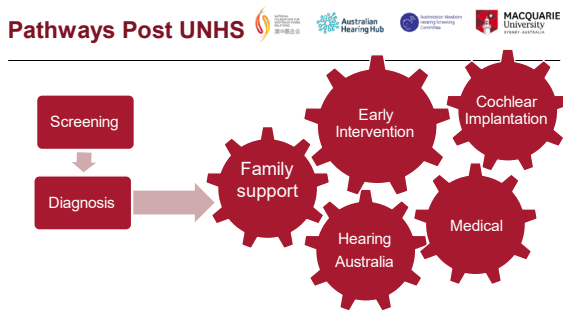
The Australian Newborn Hearing Screening Showcase Program is sponsored and supported by the National Foundation for Australia-China Relations (NFACR).

In April, a delegation, led by Professor Patrick McNeil, Deputy Vice-Chancellor (Medicine and Health), Macquarie University and composed of Australian hearing health leaders, researchers, clinicians, and support staff from the Universal Newborn Hearing Screening (UNHS) Expert Working Group visited China.

The UNHS Expert Working Group is a joint initiative of the Australian Hearing Hub at Macquarie University and the Australasian Newborn Hearing Screening Committee.

This program has been established to share Australian knowledge and experience in the development and enhancement of programs for early detection and intervention for newborns with hearing loss with colleagues in China.

The Australian UNHS Pathway



Arriving on 21 April, the group spent a week visiting hospitals, clinical centres, universities and research institutes in Chengdu, Shanghai, and Beijing. The itinerary included a series of clinical workshops, research and education roundtables, and hearing collaboration receptions with attendees welcomed by the Australian Consul-General in Chengdu, the Deputy Consul-General in Shanghai, and the Australian Ambassador to the People's Republic of China in Beijing.

Members of the Australian delegation to China

- **Professor Patrick McNeil**, Deputy Vice-Chancellor (Medicine and Health), Macquarie University
- **Professor Catherine McMahon**, Head, Department of Linguistics, Macquarie University, and Chair, Education and Practice Committee, Australian Hearing Hub
- **Professor Greg Leigh**, Director, NextSense Institute, and Chair, Australasian Newborn Hearing Screening Committee
- **Dr Zeffie Poulakis**, Director of Psychology and Inaugural Director Victorian Infant Hearing Screening Program, Royal Children's Hospital Melbourne
- **Dr Rachael Beswick**, Director and First 2000 Days program lead, Reform Office, Queensland Health
- **Ms Ann Porter**, CEO, Aussie Deaf Kids
- **Ms Patricia Van Buynder**, Principal Audiologist, Hearing Australia
- **Associate Professor Valerie Sung**, Paediatrician, The Royal Children's Hospital and Senior Research Fellow, Murdoch Children's Research Institute
- **Ms Yetta Abrahams**, Director of Education and Professional Engagement, Cochlear Limited (Asia Pacific)
- **Ms Trudy Smith**, Manager Continuing Professional Education, NextSense Institute
- **Ms Danielle Lam**, Principal Growth and Development Team, The Shepherd Centre
- **Mr Stephen Fan**, Director, Global Partnerships and Protocol, Macquarie University
- **Ms Louise Dodd**, Manager, Australian Hearing Hub
- **Ms Zirui Peng**, Project Assistant, Macquarie University

Australian Hearing Hub

Founded by



Members



CHENGDU

The delegation had the opportunity to visit Cochlear Limited manufacturing site, Chengdu Tianfu New Area, West China Hospital, and Sichuan University.

Cochlear Limited



Tianfu New Area



West China Hospital



The Australian delegation were invited to present at an Workshop titled “Overview of the UNHS Pathway and Programs” hosted by Prof. Yu Zhao, Director of the Department Otolaryngology- Head and Neck Surgery, West China Hospital of Sichuan University, Head of the Department of Audiology and Speech-Language Pathology, West China School of Medicine.

CLINICAL WORKSHOP OUTLINE _ CHENGDU

Topic	Presenter
Welcome	Prof. Yu Zhao, Director of the Department of Otolaryngology-Head and Neck Surgery, West China Hospital of Sichuan University; Head of the Department of Audiology and Speech-Language Pathology, West China School of Medicine
Remarks	Prof. Catherine McMahon, Head of the Department of Linguistics, Macquarie University / Chair Education and Practice Committee, Australian Hearing Hub
Overview of Australian Newborn Hearing Screening System	Prof. Greg Leigh, Director, NextSense Institute; Chair, Australasian Newborn Hearing Screening Committee; Dr. Zeffie Poulakis, Director of Psychology & Inaugural Director Victorian Infant Hearing Screening Program, Royal Children’s Hospital Melbourne
Newborn Hearing Screening and Diagnostic Testing	Dr. Rachael Beswick, Director and First 2000 Days program lead, Reform Office, Queensland Health
Audiological / Medical management/ Cochlear Implant Pathways	Ms. Patricia Van Buynder, Principal Audiologist, Hearing Australia; Associate Prof. Valerie Sung, Paediatrician, The Royal Children’s Hospital; Senior Research Fellow, Murdoch Childrens Research Institute; Ms. Yetta Abrahams, Director of Education and Professional Engagement, Cochlear Limited (Asia Pacific)
Family Centred Early Intervention / Parent and family support	Ms. Trudy Smith, Manager Continuing Professional Education, NextSense Institute; Ms. Danielle Lam, Principal Growth and Development Team, The Shepherd Centre; Ms. Ann Porter, CEO, Aussie Deaf Kids
Q & A	Prof. Catherine McMahon, Head of the Department of Linguistics, Macquarie University / Chair Education and Practice Committee, Australian Hearing Hub Prof. Meng Zhaoli, Deputy Director, Hearing and Speech Centre, Department of Otorhinolaryngology Head and Neck Surgery, West China Hospital, Sichuan University

Hearing reception in Chengdu

Followed by a showcase event in Chengdu, attended by 45 guests, we were honoured to have Ms. Adelle Neary, former Consul-General at the Australian Consulate General in Chengdu, and Professor Yu Zhao as special guests.



SHANGHAI

The visit to Shanghai began with an evening reception, co-hosted by the Australian Consulate General office and was attended by Mr David Warner, Australian Deputy Consul-General to Shanghai and Prof. Lei Song, Researcher of Shanghai Ninth People's Hospital and Principal Investigator of Auditory physiology Lab at Ear Institute, Shanghai Jiao Tong University School of Medicine.

Reception at Australian Consulate General office



The following day the Australian delegation visited Shanghai Jiao Tong University School of Medicine and Shanghai Ninth People's Hospital, hosted by Professor Hao Wu and attended by 97 guests including representatives and students from Shanghai No.9 Hospital and Shanghai Jiaotong University. The knowledge sharing was split into three activities: starting with a clinical workshop showcasing both China and Australia Newborn Hearing Screening pathways, followed by a research seminar, and then a campus tour of the Ear Institute, Hearing Implant Centre and Clinical Research Centre.



CLINICAL WORKSHOP OUTLINE – SHANGHAI

Host: Dr. Liping Zhang

Topic	Presenter
Welcome	Prof. Hao Wu, President, Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine Prof. Patrick McNeil, Deputy Vice-Chancellor, Macquarie University;
Introduction	Prof. Catherine McMahon, Head of the Department of Linguistics, Macquarie University / Chair Education and Practice Committee, Australian Hearing Hub
Overview of Australian Newborn Hearing Screening System	Prof. Greg Leigh, Director, NextSense Institute; Chair, Australasian Newborn Hearing Screening Committee; Dr. Zeffie Poulakis, Director of Psychology &

	Inaugural Director Victorian Infant Hearing Screening Program, Royal Children's Hospital Melbourne Dr. Rachael Beswick, Director and First 2000 Days program lead, Reform Office, Queensland Health
Universal Newborn Hearing Screening and Intervention in China	Prof. Hao Wu, President, Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine; Dr. Ying Chen, Associate Director, Department of Otolaryngology Head and Neck Surgery, Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine
Audiological / Medical management Pathways	Ms. Patricia Van Buynder, Principal Audiologist, Hearing Australia; Associate Prof. Valerie Sung, Paediatrician, The Royal Children's Hospital; Senior Research Fellow, Murdoch Childrens Research Institute;
Family Centred Early Intervention / Parent and family support	Ms. Trudy Smith, Manager Continuing Professional Education, NextSense Institute; Ms. Danielle Lam, Principal Growth and Development Team, The Shepherd Centre; Ms. Ann Porter, CEO, Aussie Deaf Kids
Q & A	Prof. Catherine McMahon, Head of the Department of Linguistics, Macquarie University / Chair Education and Practice Committee, Australian Hearing Hub

RESEARCH SHOWCASE OUTLINE – SHANGHAI

Host: Prof. Lei Song

Topic	Presenter
Beyond Speech & Longitudinal Outcomes of Children with Hearing Impairment Studies	Prof. Greg Leigh, Director, NextSense Institute; Chair, Australasian Newborn Hearing Screening Committee
Inner Ear Gene Therapy	Prof. Yong Tao, PI, Ear Institute, Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine
ANCHOR	Associate Prof. Valerie Sung, Paediatrician, The Royal Children's Hospital; Senior Research Fellow, Murdoch Children's Research Institute
Frequency Place Coding in Auditory Ascending Pathway	Prof. Lei Song, PI, Ear Institute, Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine
Cochlear Implant Gene Therapy	Prof. Catherine McMahon, Head, Department of Linguistics, Macquarie University; Chair, Education and Practice Committee, Australian Hearing Hub
Roundtable Discussion	All

Research roundtable discussion



BEIJING

The visit to Beijing started with a visit the Beijing Tongren Hospital of Capital Medical University. The clinical workshop was hosted by Prof. Chengshuo Wang, Vice President of Beijing Tongren Hospital, affiliated with Capital Medical University; Director of Beijing Institute of Otorhinolaryngology. Prof. Lihui Huang, Director of Newborn Hearing Screening Program, Beijing Tongren Hospital provided an overview of Newborn Hearing Screening in China, and the Australian delegation provided an overview the Australian Newborn Hearing Screening pathway. This was followed by an Education Roundtable.



CLINICAL WORKSHOP OUTLINE – BEIJING

Topic	Presenter
Welcome	Prof. Chengshuo Wang Vice President of Beijing Tongren Hospital, affiliated with Capital Medical University; Director of Beijing Institute of Otorhinolaryngology Prof. Patrick McNeil, Deputy Vice-Chancellor (Medicine and Health), Macquarie University
Introduction	Prof. Catherine McMahon, Head of the Department of Linguistics, Macquarie University / Chair Education and Practice Committee, Australian Hearing Hub
Overview of Australian Newborn Hearing Screening System	Prof. Greg Leigh, Director, NextSense Institute; Chair, Australasian Newborn Hearing Screening Committee; Dr. Zeffie Poulakis, Director of Psychology & Inaugural Director Victorian Infant Hearing Screening Program, Royal Children’s Hospital Melbourne
Overview of Newborn Hearing Screening Program in China	Prof. Lihui Huang, Director of Newborn Hearing Screening Program, Beijing Tongren Hospital
Newborn Hearing Screening and Diagnostic Testing	Dr. Rachael Beswick, Director and First 2000 Days program lead, Reform Office, Queensland Health
Audiological / Medical management/ Cochlear Implant Pathways	Ms. Patricia Van Buynder, Principal Audiologist, Hearing Australia; Associate Prof. Valerie Sung, Paediatrician, The Royal Children’s Hospital; Senior Research Fellow, Murdoch Childrens Research Institute; Ms. Yetta Abrahams, Director of Education and Professional Engagement, Cochlear Limited (Asia Pacific)

Intervention for hearing impaired children	Prof Danni Wang, Deputy Chief Physician of ENT Department, Beijing Tongren Hospital
Family Centred Early Intervention / Parent and family support	Ms. Trudy Smith, Manager Continuing Professional Education, NextSense Institute; Ms. Danielle Lam, Principal Growth and Development Team, The Shepherd Centre; Ms. Ann Porter, CEO, Aussie Deaf Kids

EDUCATION ROUNDTABLE OUTLINE – BEIJING

Topic	Presenter
Welcome	Prof. Shuo (Shannon) Wang, Director of the Undergraduate Program in Audiology and Speech Rehabilitation at Capital Medical University
Introduction & Overview of the existing education models in China	Capital Medical University
Shanghai Jiaotong University	Prof. Zhiwu HUANG, Director of Hearing and Speech Centre, the Shanghai Ninth People’s Hospital affiliated to Shanghai Jiao Tong University School of Medicine
Macquarie University	Prof. Catherine McMahon, Head of the Department of Linguistics, Macquarie University; Chair Education and Practice Committee, Australian Hearing Hub; Prof. Greg Leigh, Director, NextSense Institute; Chair, Australasian Newborn Hearing Screening Committee
Collaboration Pathways - Future steps -roundtable discussion	Group discussion

Hearing reception at Ambassador’s residence, Australian Embassy, China

The evening reception held at the Ambassador’s residence, Australian Embassy in China with a welcome address from Mr Scott Dewar, Ambassador to the People’s Republic of China and addresses from Prof. Han Demin, Academician of Chinese Academy of Engineering, Director of WHO Collaborative Centre in China, National Chief of Deafness Prevention and Intervention Guiding Group, Prof. Patrick McNeil, Prof. Greg Leigh, and Prof. Catherine McMahon. The event MC was Ms Carolyn Atkinson, Counsellor, Public Affairs and Culture, Australian Embassy Beijing.



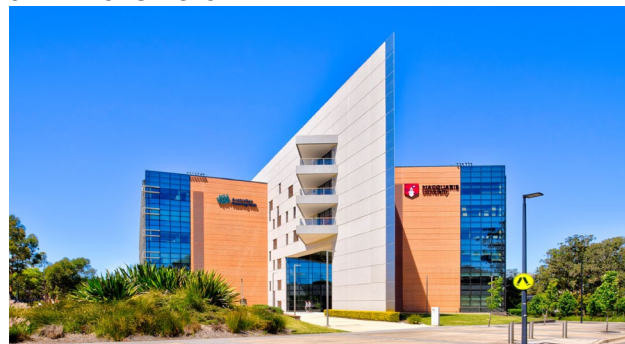
OUTCOMES AND FUTURE OPPORTUNITIES

The visit enabled delegates in Australia and China in the field of newborn hearing screening and hearing health care to reconnect, 30 years after the development of audiology in China. This visit also follows many years of collaboration between specific individuals and organisations with expertise in the delivery of hearing healthcare for children and workforce training to support this. Previously, this had fostered a siloed approach to addressing challenges within a complex system and pathway. This ensures an integrated approach to problem-solving the varying challenges which each country has in UNHS.

The visit highlighted the differences in the population and approaches to addressing this. For example, in 2022 the population of Australia was approaching 26 million and the total number of births in Australia was just over 300,000. In contrast, in 2022, the population of China was just over 1.4 billion, with births that year totalling more than 9.5 million. Therefore, a strong focus in China was on streamlining audiology patients through very busy hospitals to ensure efficiency and a high throughput of patients.

Future opportunities through strengthened partnerships include workforce training and development, research collaborations, and clinical and academic knowledge exchanges.

UNIVERSAL NEWBORN HEARING SCREENING (UNHS) SYDNEY SHOWCASE



Invitation: Universal Newborn Hearing Screening (UNHS)
- Sydney Showcase

Date: Mon 22 – Wed 24 July 2024

Location: Australian Hearing Hub, Sydney, Australia

To register your interest, please contact:

Stephen Fan stephen.fan@mq.edu.au

Zirui Peng zirui.peng@mq.edu.au

Agenda

Activity	Presenter
Welcome and breakfast	Prof. S Bruce Dowton, Vice-Chancellor and President of Macquarie University
Presentation: 30 years collaboration	Prof. Phillip Newall
Universal Newborn Hearing Screening Seminar	Prof. Greg Leigh, Prof. Catherine McMahon
Universal Newborn Hearing Screening Workshop	Prof. Greg Leigh & Prof. Catherine McMahon
Hearing Australia paediatric hearing aid fitting (demo)	Hearing Australia
Early Intervention (demo)	The Shepherd Centre
NextSense site visit	NextSense
Tele practice (demo)	
Family Centred/ Parent support visit	Aussie Deaf Kids / Parents of Deaf Children
Australian Hearing Hub - research and education facilities tour	Australian Hearing Hub
Macquarie University Hospital tour	Macquarie University Hospital
ENT Surgeon presentation	Macquarie University Hospital
Macquarie University Campus tour	Macquarie University
Cochlear site visit	Cochlear
Dinner Australian and China delegation	

Content over the three days, subject to final confirmation