

# 4<sup>th</sup> ISIET Symposium

**DIAGNOSTIC AND  
THERAPEUTIC SOLUTIONS  
FOR DEAFNESS AND BALANCE  
DISORDERS:**

Are we there yet?

**25, 26 & 27  
APRIL 2025  
MARRAKECH**  
Kenzi Menara Palace

[www.isiet.info](http://www.isiet.info)

## CONFIRMED SPEAKERS

**Sumit AGRAWAL**, Canada  
**François BERGERON**, Canada  
**Mike BOWL**, UK  
**Barbara CANLON**, Sweden  
**Wade CHIEN**, United States  
**Gabriel CORFAS**, United States  
**Alain DABDOUB**, France  
**Guodong FENG**, China  
**Anne-Lise GIRAUD**, France  
**Nils GUINAND**, Switzerland  
**Feng GUODONG**, China  
**Anil K. LALWANI**, United States

**Thomas LENARZ**, Germany  
**Natalie LOUNDON**, France  
**Thierry MOM**, France  
**Isabelle MOSNIER**, France  
**Yann NGUYEN**, France  
**Anne SCHILDER**, UK  
**Pascal SENN**, Switzerland  
**Hinrich STAECKER**, United States  
**Hung THAI VAN**, France  
**Shin-ichi USAMI**, Japan  
**Vincent VAN ROMPAEY**, Belgium  
**Christophe VINCENT**, France  
**Hao WU**, China

## ORGANISING COMMITTEE

**Dr. Saaid Safieddine**, Paris, France – **Prof. Abdelaziz Raji**, Marrakech, Morocco – **Prof. Bernard Frayssé**, Toulouse, France –  
**Dr. Ghizlene Lahlou**, Paris, France – **Prof. Hung Thai Van**, Paris, France –  
**Dr. Isabelle Mosnier**, Paris, France – **Dr. Aziz El Amraoui**, Paris, France –  
**Prof. Hinrich Staecker**, Kansas City, KA, USA – **Prof. Thomas Lenarz**, Hannover, Germany – **Prof. Natalie Loundon**, Paris, France –  
**Dr. Marie-José Lecomte**, Paris, France

## TOPICS

• Innovation in Audiology • Advancing Genetic Testing and Disease Phenotyping in Hearing Loss  
• Breakthrough Therapies for Hearing Loss • From Auditory Performance to Hearing Preservation • Advancing Prevention, Diagnosis,  
and Management • Advances in Genetic and Molecular Approaches to Hearing Loss Treatment • Innovations in Robotic-Assisted  
Inner Ear Surgery: Cochlear Implants and Beyond • Emerging Therapies for Hearing Loss: Neurotrophic Pathways, Oxidative Stress &  
Cochlear Modeling • Therapeutic Strategies for Hearing and Balance Disorders: From Gene Therapy to Vestibular Implants  
Understanding Inner ear • Breakthrough Therapies for Hearing Loss • Industry symposium





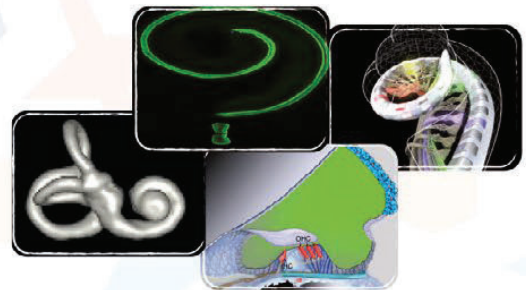
Organize the

# 4<sup>th</sup> ISIET Symposium

In partnership with

**CEMORL International ENT-HNS Conferences**

With the participation of:



**DIAGNOSTIC AND THERAPEUTIC SOLUTIONS  
FOR DEAFNESS AND BALANCE DISORDERS :**

*Are we there yet ?*

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**INFOLINE**

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## Welcome from the President

**Dear Colleagues,**

On behalf of the organizing committee, I'm pleased to welcome you to Marrakech and sincerely thank all the researchers, postdoctoral fellows, engineers, clinicians, industry partners, and sponsors for joining us.

Your ongoing support of ISIET since 2017 has played a key role in connecting basic science with clinical research, leading to new approaches in diagnosing and treating hearing and balance disorders. The ongoing DFNB9 clinical trials, led by teams from the ISIET community show just how impactful such connection can be.



I hope this 4th symposium will help us make even more progress.

This year, we are bigger than ever, with nearly 300 participants from 17 countries. It's a great chance for all of us, clinical researchers and industry partners, to share ideas, start new collaborations, and plan future projects together. You will have many opportunities to connect since most attendees will be here for the entire event, so you are likely to run into each other over breakfast, lunch, coffee breaks, or even at the hotel restaurant!

I wish you all a successful and productive meeting.

Warm regards,

Said Safieddine  
President, ISIET



## Thursday, April 24, 2025

17h30 – 19h30: Registration & Welcome

## Day 1, Friday April 25, 2025

- 07h30-08h30 Registration
- 08h00-08h10 Welcome addresses / Introduction  
**Abdelaziz RAJI** and **Saaid SAFIEDDINE**
- 08h10-08h30 **Opening lecture**  
**Anne-Lise GIRAUD**, Institut de l'Audition, Institut Pasteur, Paris.  
**Brain-Computer Interfaces for Hearing and Speech.**
- 08h30-10h00 SESSION I**  
**Advancing Genetic Testing and Disease Phenotyping in Hearing Loss**  
**Chairs: Natalie LOUNDON, Michael R. BOWL, Naima DEGGOUJ.**
- 08h30-08h45 **Ralyath BALOGOUN**, AP-HP Necker -Enfants malades, Paris.  
**Unilateral, Bilateral Symmetric or Asymmetric Isolated Hearing Loss in Patients with Heterozygous KITLG Variants.**
- 08h45-09h00 **Sandrine MARLIN**, CRMR, AP-HP Necker -Enfants malades, Paris.  
**Genetics in Neonatal Hearing.**
- 09h00-09h10 **Laurence JONARD**, AP-HP Necker -Enfants malades, Paris.  
**A French Multicenter Cohort of Patients with Heterozygous GJB2 Pathogenic Variations.**
- 09h10-09h25 **Michael R. BOWL**, UCL, London.  
**The Enigmatic *Cdh23<sup>ahl</sup>* Allele.**



## Day 1, Friday April 25, 2025

09h25-09h45: **Sandrine MARLIN**, CRMR, AP-HP Necker -Enfants malades, Paris.

**Whole Genome Sequencing of 400 Families with Early-Onset Hearing Loss: Insights from the French Reference Center.**

09h45-10h00: **Elmostapha SALMAN**, Mohammed VI University Hospital, Marrakech.

**The Frequency of the GJB2 c.35delG Mutation in Patients with Non-Syndromic Hearing Loss: First series of Mohammed VI University Hospital of Marrakech.**

10h00 – 10h30

Coffee break & Posters visit



10h30-11h30 **SESSION II**

**From Auditory Performance to Hearing Preservation**

Chairs: Isabelle MOSNIER, Christophe VINCENT, Haddou AMMAR.

10h30-10h45 **Isabelle MOSNIER**, AP-HP Pitié-Salpêtrière, Sorbonne University, Paris.

**Auditory Outcomes in Adult Cochlear Implant Recipients.**

10h45-11h00 **Prem RANJAN**, MED-EL Innsbruck.

**Hearing Preservation and EAS.**

11h00-11h20 **Arnaud COEZ**, AuditionSanté, Institut de l'Audition-CERIAH, Paris.

**Clinical Practice in Audiology: Which Data Should Be Collected in 2025 to Parameterize a Medical Device in Deafness Rehabilitation?**

11h20-11h30 **Abdelaziz RAJI**, Mohammed VI University Hospital, Marrakech.

**Hearing Preservation During Cochlear Implantation: The Value of Intraoperative Monitoring by Electrocochleography.**

**Day 1, Friday April 25, 2025**

**11h30 – 12h15**

**MEDEL Symposium**

**MED<sup>9</sup>EL**

**Chairmen: Hinrich STAECKER and Abdelaziz RAJI**

**Michel BELIAEFF**

**MED-EL the R&D Driven company.**

**Sumit AGRAWAL**

**Synchrotron Imaging of the Cochlea and Specificity of  
the Apex.**

**Alain DABDOUB**

**Non-Invasive Delivery to the Inner Ear Using Focused  
Ultrasound.**

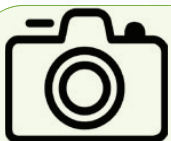
**Philippe LEFEBVRE**

**Otodrive Soft Surgery to Improve Electrode Neural  
Interface.**

**Q&A Session**

**12h15-14h00**

**LUNCH break and Posters visit**



*Picture of the 2025 ISIET Symposium attendees will  
be taken on Friday 25th, just before Lunch*



## Day 1, Friday April 25, 2025

### 14h00-15h35 **SESSION III**

#### **Advances in Genetic and Molecular Approaches to Hearing Loss Treatment**

**Chairs: Gabriel CORFAS, Vincent VAN ROMPAEY, Leila ESSAKALI.**

**14h00-14h20** **Alain DABDOUB**, Temerty Faculty of Medicine, University of Toronto, Toronto.

**Circulating Inner Ear Biomarkers: Advancing Rapid Detection with an Electrochemical Immuno-Biosensor.**

**14h20-14h40** **Wade CHIEN**, Johns Hopkins School of Medicine, Baltimore.  
**Application of Genome Editing to a Mouse Model of DFNA20.**

**14h40-15h00** **Vincent VAN ROMPAEY**, University of Antwerp, Antwerp.  
**Functional Outcome in a Rationally Designed Genomically Humanized Mouse Model for Dominantly Inherited Hearing Loss DFNA9.**

**15h00-15h20** **Gabriel CORFAS**, Kresge Hearing Research Institute, Ann Arbor.  
**Identifying the Mechanisms and Potential New Treatments for Noise-Induced Hearing Loss Using Metabolomics and Lipidomics.**

**15h20-15h35** **Arnaud NORENA**, CNRS, Aix Marseille University, Marseille.  
**Combining Sound Therapy and Cardiac Coherence for the Management of Chronic Pain and Tinnitus in Canadian Veterans.**

## Day 1, Friday April 25, 2025

**15h35 – 16h05**

### **Cochlear Symposium**

**Inspired by Lifetime of Hearing Performance.**

**Bart VOLCKAERTS**, (Vice President Clinical Affairs & Market Access EMEA).



**16h05 – 16h30**

### **Coffee break & Posters visit**



### **16h30-17h25 SESSION IV**

#### **Innovation in Audiology**

**Chairs: Ghizlene LAHLOU, Thierry MOM, Youssef ROCHDI.**

**16h30-16h45**

**Hung THAI VAN**, CHU Lyon, Institut de l'Audition, Paris.  
**Testing the Ascending and Descending Auditory Pathways in Subjects with Neurodevelopmental Disorders.**

**16h45-16h55**

**Perrine MORVAN**, CHU Lyon, Institut de l'Audition, Paris.  
**Beyond the Audiogram: Using PROMs and AI Modelling to Characterize Age and Sex-Specific Hearing Loss Needs in a Nationwide Study.**

**16h55-17h10**

**Arnaud NORENA**, CNRS, Aix Marseille University, Marseille.  
**The Putative Contribution of the Middle Ear and Trigeminal System to Tinnitus and Hyperacusis.**

**17h10-17h25**

**Massimiliano ACRI**, Clinical Audiologist Centro Per Acufeni e Disturbi del Sonno, Verona.  
**TRT (Tinnitus Retraining Therapy): The Selection Criteria for a Good Result.**





## Day 1, Friday April 25, 2025

### 17h25-18h30 **OFFICIAL INAUGURATION**

**Chairs: Saaid SAFIEDDINE, Abdelaziz RAJI**

**17h25-17h30** **Saaïd SAFIEDDINE**, ISIET President.

**17h30-17h35** **Hussain Abdul Rahman Al RAND**, President of the IFOS.

**17h35-17h45** **Karim SKALLI**, NASMAA program of the Lalla ASMAA Foundation for deaf Children.

**17h45-18h30** **Key note lecture: François BERGERON**, Laval University, Québec.  
**Diagnostic and Therapeutic Solutions for Hearing Loss: Are We There Yet in Northern North-America?**

**20h00 Dinner for ISIET Founding members & guests**



## Day 2, Saturday, April 26, 2025

### 08h00-09h30 **SESSION V**

#### **Therapeutic Strategies for Hearing and Balance Disorders: From Gene Therapy to Vestibular Implants**

**Chairs: Anne-SCHILDER, Hinrich STAECKER,  
Fouad BENARIBA.**

**08h00-08h15** **Ghizlene LAHLOU**, Institut de l'Audition, Institut Pasteur, AP-HP, Paris.

**Cell Tropism of Adeno-Associated Viruses Within the Mouse Inner Ear In Vivo: From Embryonic to Adult Stages.**

**08h15-08h35** **Nils GUINAND**, Clinical Neurosciences, Geneva University Hospital., Geneva.

**Baseline Electrical Stimulation Can Improve Function in Patients Implanted with Vestibulo-Cochlear Implants.**

**08h35-08h55** **Pascal SENN**, Geneva University Hospitals, Geneva.

**From Regeneration of Auditory Neurons to Drug Screening.**

**08h55-09h15** **Barbara CANLON**, Karolinska Institute, Stockholm.

**Circadian Rhythms in the Auditory and Vestibular Systems: Importance for New Therapeutic Solutions.**

**09h15-09h30** **Erik De VRIEZE**, Radboud University Medical Center, Nijmegen.

**Antisense Oligonucleotides for Dominantly Inherited Hearing Impairment DFNA9: From Cell Models to Humanized Mice.**



## Day 2, Saturday, April 26, 2025

### 09h30-11h00 **SESSION VI**

#### **Innovations in Robotic-Assisted Inner Ear Surgery: Cochlear Implants and Beyond**

**Chairs: Yann NGUYEN, Guodong FENG, Razika BENCHEIKH.**

**09h30-09h50** **Sumit AGRAWAL**, Western University, London.  
**Synchrotron Anatomy of the Inner Ear.**

**09h50-10h05** **Yann NGUYEN**, Institut de l'Audition, Institut Pasteur, AP-HP, Paris.  
**Robotic-Assisted Insertion of Cochlear Implant CI632: an Ex-Vivo Study.**

**10h05-10h20** **Thierry MOM**, CHU, Clermont-Ferrand.  
**Hearing Preservation in Cochlear Implantation with Robotized Insertion Under Fluoroscopy.**

**10h20-10h35** **Huan JIA**, Shanghai Ninth People's Hospital, Shanghai.  
**A Grading Framework of Transcanal Round Window Membrane Targeting and Robotic Innovation for this Approach.**

**10h35-10h45** **Agathe BEDOUX**, INSERM U1026, BioTis, Université de Bordeaux, Bordeaux.  
**Laser-Assisted Drug Delivery to the Inner Ear: An Ex Vivo Proof of Concept.**

**10h45-11h00** **Yutaka TAKUMI**, Shinshu University School of Medicine, Matsumoto.  
**Cochlear implant performance in hearing loss patients with GJB2 variants.**

**11h00-11h30**

**Coffee break & Posters visit**





**Day 2, Saturday, April 26, 2025**

**11h30-12h15**

**Sensorion Symposium**



**Hearing Loss Innovation:  
Expanding Frontiers in Protection & Restoration**

**Moderator: Nawal OUZREN, Chief Executive Officer, Sensorion**

- **Protecting Hair cells, Preserving Hearing : The Potential of SENS-401.**  
**Yann NGUYEN**, Department of Otolaryngology-Head & Neck Surgery, Pitié-Salpêtrière Hospital, Paris.
- **From Bench to Bedside: The Journey of GJB2 & OTOF Gene Therapies for Children with Severe to Profound Hearing Loss. Advancing Gene Therapy for OTOF-Related Hearing Loss in Young Children.**  
**Natalie LOUNDON**, Pediatric Department of Otolaryngology-Head & Neck Surgery, Necker Enfants Malades, Paris.
- **Developing Novel Gene Therapy for Hereditary Hearing Loss in Patients with GJB2 Mutations.**  
**Laurent DESIRE**, PhD, Head of Preclinical Development, Sensorion.
- **Q&A Session & Conclusion.**  
**Nawal OUZREN**, Chief Executive Officer, Sensorion

**12h15-14h00**

**LUNCH break (Posters visit)**





## Day 2, Saturday, April 26, 2025

14h00-15h10

### SESSION VII

#### Understanding Inner ear

**Chairs:** Anil K. LALWANI, Francoise DENOYELLE,  
Othmane BENHOUMMAD.

14h00 -14h20

**Shin-Ichi USAMI**, Shinshu University School of Medicine,  
Matsumoto.

**The Use of Flex 28 Dex-Eluting Electrode in Relation to  
Genetics and EAS.**

14h20-14h40

**Guodong FENG**, Peking Union Medical College Hospital,  
Beijing.

**Biomechanical Properties of The Basilar Membrane in  
Miniature Pigs.**

14h40-14h55

**Shin-Ya NISHIO**, Shinshu University School of Medicine,  
Mastumoto.

**Tonotopic Gene Expression in the Developing Fetal  
Human Inner Ear.**

14h55-15h10

**Anil K. LALWANI**, Columbia Vagelos College of Physicians  
and Surgeons, New-York.

**Conquering the Barriers to Precision Inner Ear Medicine.**

15h10-15h50

### SESSION VIII-1

#### Breakthrough Therapies for Hearing Loss

**Chairs:** Alain DABDOUB, Barbara CANLON,  
Najib BELMANSOUR.

15h10-15h30

**Guodong FENG**, Peking Union Medical College Hospital,  
Beijing.

**Gene Therapy for Congenital Sensorineural Hearing Loss  
Related to OTOF Gene Mutations: A Report of 3 Cases.**

15h30-15h50

**Anne-SCHILDER**, UCL, London.

**Leanings From the REGAIN Trial, a Phase I/IIa Safety  
and Efficacy Trial of Intratympanic Gamma-Secretase  
Inhibitor as a Regenerative Drug Treatment for  
Sensorineural Hearing Loss.**

15h50-16h30

Coffee break & Posters visit



## Day 2, Saturday, April 26, 2025

### 16h30-18h20 **SESSION VIII-2**

#### **Breakthrough Therapies for Hearing Loss**

**Chairs: Thomas LENARZ, Brigitte MALGRANGE,  
Mohamed RIDAL.**

**16h30-16h45** **Christophe VINCENT**, CHU, Lille.

**In Vivo Pharmacological Study of an Intracochlear  
Dexamethasone-Loaded EVA Implant.**

**16h45-17h00** **Nils PRENZLER**, Hannover Medical School, Hannover.

**From Bench to Bedside: Vesicle-Rich Secretome Fraction  
from Umbilical Cord Mesenchymal Stromal Cells as Novel  
Inner Ear Therapeutics in Cochlear Implantation.**

**17h00-17h20** **Hao WU**, Shanghai Jiaotong University Ear Institute,  
Shanghai.

**A Directed Evolution Novel Adeno-Associated Virus  
(AAV-WM04) Mediated Gene Therapy Restores Hearing in  
OTOF Mutation-Related Deafness in Animal Models and  
Patients.**

**17h20-17h40** **Shin-Ichi USAMI**, Shinshu University School of Medicine,  
Matsumoto.

**Genotype-Phenotype Correlations in 1,246 Patients with  
Hearing Loss Caused by GJB2 Gene Variants: Towards  
Gene Therapy.**

**17h40-18h00** **Thomas LENARZ**, Hannover Medical School, Hannover.

**Clinical Longterm Results of a Flexible Dexamethasone-  
Eluting Cochlear Implant Electrode.**

**18h00-18h20** **Hidekane YOSHIMURA**,  
Shinshu University School of Medicine, Matsumoto.

**The Most Appropriate Gene Delivery Approach: Based on  
625 Temporal Bone CT Scans.**

**20h00**

**Symposium Dinner**







## Day 3, Sunday, April 27

### 08h00-09h15 **SESSION IX**

#### **Gene Therapy Breakthroughs in Hearing Loss**

**Chairs: Didier DULON, Pascal SENN, Fehd ELAYOUBI.**

**08h00-08h20** **Didier DULON**, Institut de l'Audition, Inserm and Institut Pasteur, Paris.

**Alternative Splicing of Otoferlin in Hair Cell Synaptic Transmission.**

**08h20-08h40** **Kazusaku KAMIYA**, Juntendo University Faculty of Medicine, Tokyo.

**AAV Gene Therapy Targeting GJB2 Related Hearing Loss by Capsid and Promoter Modification.**

**08h40-09h00** **Hinrich STAECKER**, University of Kansas School of Medicine, Kansas City.

**Developing New AAV Vectors for Inner Ear Disorders: Rational Design and Directed Evolution.**

**09h00-09h15** **Aziz EL-AMRAOUI**, Institut de l'Audition, Institut Pasteur, Paris.

**The Evolutionary Edge in Gene Therapy for Mammalian Hearing and Balance: Lessons from Clarin-Deficient Models.**

## Day 3, Sunday, April 27

### 09h15-10h15 **SESSION X**

#### **Advancing Prevention, Diagnosis, and Management**

**Chairs: Arnaud NORENA, Brigitte MALGRANGE,  
Ilham RKAIN.**

- 09h15-09h30** **Federico CERIANI**, University of Sheffield, Sheffield.  
**A Machine-Learning-Based Approach for Early Detection  
of Progressive Hearing Loss.**
- 09h30-09h45** **Nish MEHTA**, Ear Institute UCL, London.  
**Using Artificial Intelligence for Hearing Loss Research  
and Healthcare.**
- 09h45-10h00** **Zhao YANG**, Peking Union Medical College Hospital, Beijing.  
**Facial Nerve-Aware and Biomechanically Modeled  
Robotic Cochlear Implantation: Toward Safer and More  
Precise Electrode Insertion.**
- 10h00-10h15** **Abdulrahman HAGR**, King Saud University, Rhyad.  
**Minimalism with Implantable Device.**

**10h15-10h45** **Coffee break & Posters visit**





## Day 3, Sunday, April 27

### 10h45-12h00 **SESSION XI**

#### **Emerging Therapies for Hearing Loss: Neurotrophic Pathways, Oxidative Stress & Cochlear Modeling**

**Chairs: Aziz El AMRAOUI, Karim NADOUR,  
Abdulrahman HAGR.**

- 10h45-11h05** **Yi-CHAO HSU**, MacKay Medical College, Taipei.  
**Neurotrophic Factors and Neural Stem/Progenitor Cells  
Improve Sensorineural Hearing Loss in Mice.**
- 11h05-11h25:** **Lucie OBERHAUSER**, University of Geneva, Geneva.  
**Discovery of NOX3 Inhibitors for the Prevention of  
Acquired Hearing Loss.**
- 11h25-11h45** **Brigitte MALGRANGE**, University of Liege, Liege.  
**Modelling Hereditary Hearing Loss with Human  
3D Cochlear Organoids: Focus on Sifrim-Hitz Weiss  
Syndrome.**
- 11h45-12h00** **Saaïd SAFIEDDINE**, Institut de l'Audition, Institut Pasteur,  
Paris.  
**AAV-Mediated STRC Gene Therapy Rescues Cochlear  
Function and sound Processing Capabilities in a DFNB16  
Mouse Model.**

### 12h00-13h00 **CLOSING REMARKS AND POSTER PRIZE CEREMONY**

**13h00-14h00** **Lunch & Farewell**





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