

4th Tinnitus Research Initiative Meeting. Frontiers in Tinnitus Research
 An international Conference on Tinnitus
 June 8th - 11th, 2010, Dallas, Texas, US

OVERVIEW SCIENTIFIC PROGRAM

	June 8 th	June 9 th	June 10 th	June 11 th			
08:00 - 09:00 a.m.		PLENARY TALK: Thalamocortical Dysrhythmia and Tinnitus Rodolfo Llinas	PLENARY TALK: Synaptic Physiology of Cochlear Hair Cells: Afferent Signaling Paul Fuchs	PLENARY TALK: Tinnitus and Neural Plasticity Larry Roberts			
09:00 - 10:00 a.m.		PLENARY TALK: Do Sensory Cortices Process More than One Sensory Modality During Perceptual Judgements? Ranulfo Romo	PLENARY TALK: Tinnitus and Affective Disorders Berthold Langguth	PLENARY TALK: Increase in gain in the auditory system Arnaud Norena			
-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----							
10:30 a.m. - 12:30 p.m.		Pathophysiology of tinnitus A Norena, D de Ridder	Somatosensory Tinnitus TG Sanchez	Behavioral Therapy M Mazzoli	TMS / VNS A Londero	Sound Therapy G Searchfield	Pharmacologic Treatment of Tinnitus AB Elgoyhen
12:30 a.m – 1:30 p.m.-----LUNCH -----LUNCH -----							
01:30 - 03:30 p.m.		POSTER SESSION	POSTER SESSION Specific Forms of Tinnitus: T Kleinjung	Animal Models R Salvi	Electrical Stimulation to the Brain and to the Ear A Møller	Perceptual Training G Searchfield	
-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----							
04:00 - 06:00 p.m.		Neuroimaging in Tinnitus: Mechanisms and Networks F Husain	Design of Clinical Trials M Landgrebe, WH Martin	The TRI Flowchart for Patient Management B Langguth	Animal Models R Salvi	Imaging II N Weisz	Audiologic Assessment R Roeser New Hypotheses JM Lainez
06:00 - 07:00 p.m.	OPENING LECTURE: Richard Salvi <i>Welcome Cocktail</i>	MEETING: Is there a need for an international Tinnitus Society					
-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----							
08:00 p.m.			<i>BANQUET</i>				

DETAILED SCIENTIFIC PROGRAM

Tuesday, June 8th

06:00 -
07:00 p.m.

Opening lecture: The Role of the Hippocampus in Tinnitus and Hearing

Richard Salvi

Welcome Cocktail

Wednesday, June 9th

08:00 -
09:00 a.m.

Plenary Talk: **Thalamocortical Dysrhythmia and Tinnitus**

Rodolfo Llinas

09:00 -
10:00 a.m.

Plenary Talk: **Do Sensory Cortices Process More than One Sensory Modality During Perceptual Judgements?**

Ranulfo Romo

-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----

10:30 -
12:30 p.m.

Pathophysiology of Tinnitus

A. Norena / D. de Ridder

R. Levine: The brainstem and tinnitus: Adjustments to the dorsal cochlear nucleus tinnitus hypothesis
D. De Ridder & Elsa van der Loo: The involvement of auditory cortex in tinnitus
S. Vaneste: A network approach for understanding tinnitus pathophysiology
B. Langguth: The involvement of nonauditory brain regions in tinnitus

Neuroscience and Clinical Research on Somatosensory Tinnitus

T.G. Sanchez

R. Bürgers et al: Temporomandibular joint and masticatory muscle disorders in patients with tinnitus
T.G. Sanchez: Deactivation of myofascial trigger points is effective to control somatosensory tinnitus
S. Shore: Neural basis of somatosensory influence on tinnitus
Q. Yang et al: Abnormalities of vergence eye movements in somatic tinnitus
J. Zhang: Electrical suppression of tinnitus

12:30 - 01:30 p.m.-----LUNCH-----LUNCH-----LUNCH-----

01:30 -
03:30 p.m.

POSTER SESSION

-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----

04:00 -
06:00 p.m.

Neuroimaging in Tinnitus: Mechanisms and Networks
F. Husain

E. Diesch: Altered inhibitory processes in Tinnitus: MEG studies
D. Hall et al: Challenges and rewards of brain imaging in tinnitus
F. Husain et al: Neural network differences in tinnitus and hearing loss: An fMRI study
J. Melcher et al: Is the frontal lobe involved in tinnitus? A structural MRI study
D.J. Strauss et al: Event-Related Potentials as Correlates of Attentional Binding in Tinnitus: Some Insight from Neurodynamical Multiscale Modeling

Design of Clinical Trials
M. Landgrebe / W.H. Martin

P. Davis, S. Ransdell: Meta-Analysis of Current Tinnitus Treatments
M. Koller et al: Which changes in the THI score are clinically relevant?
M. Landgrebe et al: The Tinnitus Research Initiative (TRI) database: A new approach for delineation of tinnitus subtypes and generation of predictors for treatment outcome
W.H. Martin et al: Fatal experimental design flaws in clinical trials of tinnitus interventions
B. Schmidt: Bringing a Tinnitus Medication to Market: Challenges for the Pharmaceutical Industry

06:00 -
07:00 p.m.

MEETING: Is there a need for an international Tinnitus Society

Thursday, June 10th		
08:00 - 09:00 a.m.	Plenary Talk: Synaptic Physiology of Cochlear Hair Cells: Afferent Signaling Paul Fuchs	
09:00 - 10:00 a.m.	Plenary Talk: Tinnitus and Affective Disorders Berthold Langguth	
-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----		
10:30 - 12:30 p.m.	Behavioral Therapy M. Mazzoli H. Argstetter et al: The Heidelberg Model Music therapy in chronic tinnitus – treatment outline and neuroscientific evaluation M. Mazzoli et al: Mindfulness based stress reduction (MBSR) intervention in tinnitus therapy L. McKenna: A cognitive therapy model of tinnitus distress K. Peterson: 10 dilemmas in clinical work with tinnitus sufferers - Why neurophysiology and psychology should join forces in research and clinical practice H-P. Zenner: Psychophysiological treatment of tinnitus	TMS / VNS A. Londero M. Landgrebe et al: rTMS for the treatment of tinnitus: Results of a large randomized sham controlled trial T. Kleinjung et al: Strategies for enhancement of temporal rTMS in tinnitus patients J.F. Piccirillo et al: Low-frequency rTMS over the left temporoparietal area for bothersome tinnituis I. Lorenz et al: Transcranial Magnetic Stimulation as a Treatment of Chronic Tinnitus: A Critical View of the Status Quo and a New Therapy Approach N. Weisz, I. Lorenz: The Quest for the Magic Bullet against tinnitus: can sound stimulation aid in improving the spatial accuracy of rTMS S. Vaneste: Correlation between tDCS, TMS and TENS: are some brains more responsive than others to neuromodulation K. Engineer et al: Reversing Pathological Neural Plasticity to Treat Tinnitus
12:30 - 01:30 p.m.-----LUNCH-----LUNCH-----LUNCH-----		
01:30 - 02:30 p.m.	POSTER SESSION	
02:30 - 03:30 p.m.	Specific Forms of Tinnitus T. Kleinjung F. Bast et al: Otosclerosis and Tinnitus – Effect of the laser-assisted stapedotomy on preoperativ cases of tinnitus M.E. Hoffer et al: Blast Induced Tinnitus D. Roitman: Lightning and tinnitus, Three new cases of tinnitus resulting from lightning T.G. Sanchez et al: Auditory hallucinative phenomenon, tinnitus and hearing loss: truth or myth?	Animal Models R. Salvi B.J. Farley, A. Norena: Auditory cortex voltage-sensitive dye imaging reveals spatiotemporal patterns of spontaneous and evoked neural activity at high resolution A. Fryatt et al: Altered voltage-gated sodium channel expression following moderate sound exposure in rat spiral ganglion neurons Th. Imig et al: Unilateral sound damage causes an increase in single unit spontaneous activity in the inferior colliculus of freely moving rats S. Voytenko, A. Galazyuk: Sound-triggered suppression of spontaneous firing in central auditory neurons and residual inhibition of tinnitus T. Kitahara et al: Behavioral and molecular combined animal studies for visualization of phantom tinnitus S. Hébert, P. Fournier: From rats to humans: Validation of the acoustic gap startle paradigm to objectify tinnitus E. Lobarinas: The effects of Tonabersat and Cyclobenzaprine on Noise Induced Tinnitus in rats J.G. Turner et al: Effects of Neramexane in a Mouse Model of Tinnitus C. Wu et al: Screening of Investigational Tinnitus Drugs Using Cultured Auditory Cortex Networks
-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----		
04:00 - 06:00 p.m.	The TRI Flowchart for Patient Management M. Koller: Introduction: Medical Guidelines T. Kleinjung: History / Clin exam / Audiol Measurements D. De Ridder: Pulsatile Tinnitus T. Kleinjung: Tinnitus + Conduct. Hearing Loss L. Del Bo: Tinnitus + Sensorineural Hearing Loss A. Londero: Tinnitus + Vertigo J.M. Lainez: Tinnitus + Headache M. Landgrebe: Tinnitus + Psychiatric Comorbidity T. Sanchez: Somatosensoric Tinnitus G. Searchfield: Auditory Stimulation B. Langguth: Pharmacotherapy M. Landgrebe: Cognitive Behavioral Therapy D. De Ridder: Neurostimulation	Animal Models R. Salvi ... Continuation
BANQUET		

Friday, June 11th		
08:00 - 09:00 a.m.	Plenary Talk: Tinnitus and Neural Plasticity Larry Roberts	
09:00 - 10:00 a.m.	Plenary Talk: Neuroplastic changes induced by auditory stimulation Arnaud Norena	
-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----		
10:30 - 12:30 p.m.	Sound Stimulation G. Searchfield	Pharmacological Treatment of Tinnitus A.B. Elgoyhen
	<p>M. Bergholm et al: Internet-based acoustic therapy (IBAT) for tinnitus patients</p> <p>G. Searchfield et al: The effect of fractal sounds on tinnitus perception</p> <p>P.A. Tass et al: Long-lasting tinnitus relief achieved by acoustic coordinated reset stimulation - Clinical investigation: Phase I - Prospective clinical investigation on the acoustic stimulation with the "coordinated reset of neural subpopulations" in the treatment of chronic Tinnitus</p> <p>L. Del Bo et al: Passive Auditory Stimulation by MP3: results after 6 months.</p> <p>B. Raymond et al: The New Zealand experience with a new sound therapy concept</p> <p>L. Del Bo et al: Passive Auditory Stimulation by a prototype of hearing aid that implements the high-pitch auditory stimulation.</p> <p>O. Dyrlund: High frequency dual sound generator combination instrument for tinnitus sound therapy.</p>	<p>C. Coelho: Cyclobenzaprine to treat chronic tinnitus: results of a 16 weeks prospective open-label trial</p> <p>K. Egler et al: Physicians' assessment of tinnitus treatment options in Europe and the US</p> <p>R. Figueiredo et al: Effects of Caffeine in tinnitus: preliminary data</p> <p>O. Meeus et al: Administration of the combination Clonazepam – Deanxit as a treatment for tinnitus</p>
12:30 - 01:30 p.m.-----LUNCH-----LUNCH-----LUNCH-----		
01:30 - 03:30 p.m.	Electrical Stimulation to the Brain and to the Ear A. Møller	Perceptual Training G. Searchfield
	<p>D. de Ridder: Epidural cortical stimulation for the treatment of tinnitus: an update</p> <p>E. Simon et al: Epidural electrical auditory cortex stimulation in the management of chronic unilateral disabling tinnitus: first results of the pilot study "Electin"</p> <p>J. Zhang et al: Auditory Cortex Electrical Stimulation to Suppress Tinnitus: An Animal Model</p> <p>J.E. Chang et al: Variability in Tinnitus Suppression via Electric Stimulation</p> <p>A. Kleine Punte et al: Electrical promontory stimulation to predict tinnitus suppression after cochlear implantation</p> <p>A. Kleine Punte et al: Cochlear Implantation as a durable tinnitus treatment in patients with single-sided deafness</p>	<p>D. Hoare et al: The effects of auditory training on tinnitus perception and intrusiveness: a systematic review</p> <p>L.E. Roberts, D. Bosnyak: Augmentation of cortical representations for sound in the tinnitus frequency region and its effects on tinnitus</p> <p>G. Searchfield, K. Wise: Attention Process Training for Tinnitus</p> <p>I. Viaud-Delmon et al: Virtual reality protocol for Tinnitus</p>
-----Coffee Break (30 min)-----Coffee Break (30 min)-----Coffee Break (30 min)-----		
04:00 - 06:00 p.m.	Imaging II N. Weisz	Audiologic Assessment R. Roeser
	<p>K.L. Hyde et al: A Voxel-Based-Morphometry Study of Structural Brain Differences in Unilateral Tinnitus</p> <p>A. Maudoux et al: Resting state auditory network in tinnitus patients: a fMRI study</p> <p>D. Bosnyak, L.E. Roberts: The relation between the amplitude of the 40-Hz auditory steady-state response and the tinnitus percept suggests abnormal neural activity during tinnitus but not during residual inhibition.</p> <p>A. Dimitrijevic et al: Electrophysiological correlates of tinnitus and tinnitus suppression</p> <p>H. Okamoto et al: Detrimental effects of extensive portable music player usage on population-level frequency tuning in human auditory cortex</p> <p>H. Stracke et al: Listening to tailor-made notched music reduces tinnitus loudness and tinnitus-related auditory cortex activity</p>	<p>M. Sereda et al: The relationship between tinnitus pitch and audiometric variables: A meta analysis</p> <p>J. Smurzynski et al: Distortion product otoacoustic emissions in normally hearing patients with unilateral tinnitus</p> <p>O. Warusfel et al: Virtual Reality for Tinnitus therapy: Tinnitus recreation method</p> <p>X. Zhou et al: Loss of Cochlear compression is predictive of Tinnitus for subjects with mild to moderate hearing loss</p>
		New Hypotheses J.M. Lainez
		<p>K. Brookler, N. Gilston: Molecular biology of tinnitus: Cytokine and Endocrine Causes</p> <p>D.W. Holmes: The Use of Ultrasound in the Treatment of Tinnitus</p> <p>D. de Ridder: Allostasis as a mechanism for tinnitus chronification</p> <p>M. Murase: Towards a New Synthesis: Health and Disease</p>
End of the Conference		

Posters

June 09, 2010
01:30 – 02:20 p.m.

Assessment Questionnaires

R Görtelmeyer et al	Development and Psychometric Validation of the Attention and Performance Self Assessment Scale (APSA) in tinnitus patients
DW Holmes	Development of a Tinnitus Evaluation Software Program
US Korbel et al	Intercultural Validation of the Tinnitus Handicap Inventory 12 (THI-12)
O Meeus et al	Independency of variables in a tinnitus population

Audiological Assessment

B Chaudhury et al	Individual Profiling of Tinnitus Perception by developing Interactive Tinnitus Analyzer Software
P Nee et al	Comparing an Online Tinnitus Examination to a Tinnitus Exam in a Research Environment
HJ Shim et al	Hearing abilities at high frequency in patients with tinnitus

Clinical Trials

M Koller et al	THI score changes over the course of therapy and patient's subjective perception of tinnitus change
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Epidemiology

R Figueiredo et al	Incidence of tinnitus in teenagers and young adults mp3 players users
D Roitman, A Aspinwall	Survey Online about Tinnitus and hyperacusis, via our website

Health System

Ph Gander et al	A survey of Audiology departments across England: Referral pathways
D Hoare et al	A survey of Audiology departments across England: Tinnitus assessment, treatment and outcome measures
J Lim et al	Experience of a tinnitus counseling clinic in Singapore

Pathophysiology

J Ylikoski et al	Stress reaction in patients with acute noise induced tinnitus
H-P. Zenner	The sensitization model for acquired centralized tinnitus
N. Catz, A.J. Norena	Changes in the cortical spectro-temporal receptive fields induced by notched stimuli
L Lagemann et al	Frequency tuning in chronic tinnitus patients

June 09, 2010
02:30 – 03:30 p.m.

Case Reports

Z Komacek et al	Unilateral Tinnitus – The Only Symptom of a Large Vestibular Schwannoma
JJ Song, JW Koo,	Recording and analysis of pulsatile tinnitus in dural sinus diverticulum
P Winkler	Early intervention in sudden onset tinnitus

Others

G Reul, M. Malusevic	American Tinnitus Association : Our Mission To Cure Tinnitus
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Somatosensory Tinnitus	
E Biesinger et al	Qigong for the treatment of tinnitus. A randomized controlled pilot study
M Estola	Muscular tension and tinnitus. An experimental Trial of Trigger Point Injections on Tinnitus
R Levine et al	Continuous auricular electrical stimulation quiets the tinnitus of the somatosensory pulsatile tinnitus syndrome
SN Park	Clinical Characteristics and Therapeutic Responses of Muscle Origin Tinnitus
C Rocha, TG Sanchez	Efficacy of myofascial trigger point deactivation for tinnitus treatment
V Vielsmeier et al	Tinnitus and temporomandibular joint disorders – a special subgroup of tinnitus patients?
Specific Forms of Tinnitus	
G Baracca et al	Botulinum toxin treatment for objective tinnitus caused by palatal myoclonus
AC Binetti, et al	Tinnitus in Vestibular Migraine
P Gao, Y Jin	New Pathogen and Therapy - In 17 Cases of Chronic Conductive Tinnitus
J-W Koo	Recording and analysis of pulsatile tinnitus in dural sinus diverticulum
J-H Lee	Evaluation of Tinnitus in the patients with Meniere's Disease
SN Park	A Case of Palatal Myoclonus Associated with Orofacial Buccal Dystonia

June 10, 2010 01:30 – 02:30 p.m.	
Auditory Stimulation	
G Baracca et al	Customized Sound Therapy for Tinnitus
D Choy	Sequential phase shift sound cancellation RX predominant tone tinnitus
M Nakagawa	A Study of Music Therapy using “1/f-fluctuation sounds” for Tinnitus patients
CW Newman, SA Sandridge	Benefit from and economic value associated with two alternative sound therapy tinnitus management options
M Piskosz	Clinical application of a new Tinnitus Sound Generator (TSG) device
VS Rothholtz et al (pres. author: KM Reavis)	Tinnitus Suppression by Low-Rate Modulated Sounds
SA Sandridge, CW Newman	First year findings of three-year study of long-term benefits of neuromonics treatment
M-W Suh et al	Specific Effects and Prognostic Factors of Hearing Aids on Tinnitus
Brain Stimulation	
SJ Burger	rTMS for the treatment of tinnitus: Are there clinical parameters which predict the therapeutic response and what happens with responders over longer follow-up periods ?
K Ogawa	Repetitive transcranial magnetic stimulation for treatment of chronic tinnitus. -Clinical and experimental study
M. Landgrebe	Clinical improvement after repetitive transcranial magnetic stimulation is accompanied by changes in gray matter detected by voxel-based morphology
Cochlear Implant	
M Cosgarea et al	Tinnitus after cochlear implantation
A Kleine Punte	Electric acoustic stimulation and tinnitus
Neurofeedback	
B Richmond et al	Developing a Brain Computer Interface (BCI) for Neuromodulation of Tinnitus Disability

Nutrition	
K Prasad et al	Micronutrients in Prevention and Improvement of Standard Therapy in Tinnitus
Animal Pathophysiology	
J Suchland, M Kössl	Effects of local salicylate application on inferior colliculus neuronal activity in vivo
Pharmacology	
M.A. Lopez-Gonzalez et al	Oral glycine inhibits cortical activity in tinnitus patients
MA Lopez-Gonzalez et al	Wine and histamine in tinnitus
AK Shukuryan et al	Treatment of tinnitus in hypertensive patients

Poster Format: portrait 90 cm width x 120 cm height (35,5 inch x 47,5 inch).