MELANIE WEST, MODERATOR: Good evening and welcome to ATA’s first webinar in 2016. Tonight’s topic is Sound Therapy. We will discuss current available therapies as well as why sound therapy works. Then, we will venture into prospective forms of sound therapy and what might be coming up in the future. My name is Melanie West and I am the current Chair of the ATA Board of Directors as well as acting Executive Director. On behalf of the entire leadership of ATA I would like to wish you all a Happy New Year and thank you for joining us here tonight. We are excited to kick off our 2016 webinar series with a topic that will inform our viewers about what they can do today to manage their tinnitus. I want to be clear upfront, that ATA does not endorse or recommend any particular treatment or product. The reason I say this is because we will hear tonight about several different devices and forms of sound therapy. This program is for informational purposes only and to provide you with an overview of what’s currently available. So please do not mistake the presentation for an endorsement of any kind for any particular device or treatment. ATA remains committed to curing tinnitus by funding research, it is so important that people can find some relief now and a way to restore quality of life. Whether you’ve tried this treatment or not, I think what you will learn tonight about sound therapy may enlighten you and make you look at sound therapy in a brand new light. And what better way to learn about this than from the experts themselves!

We are fortunate this evening to have Dr. Norma Mraz, an audiologist from Alpharetta, Georgia who is also an ATA Board member and Dr. Grant Searchfield who is a member of ATA’s Scientific Advisory Committee speaking to you all the way from Auckland, New Zealand. We also have Connie Decker, an ATA member who will share her journey with tinnitus and Jodi Asmus and Jennifer Born from the ATA staff who will be talking about ATA and helping to facilitate the webinar tonight. But before we begin I’d just like to go over a few housekeeping items as well as direct you to some of the functions you may be asked to use during the course of the webinar on your control panel.

During the webinar you will be asked to answer a poll. To answer the question simply click your answer with your mouse or by using your touch screen. If you are on the telephone, you will not be able to answer these questions.
If at any time you lose the audio connection through your speakers, please use the dial-in information provided in the email you received. If you lose both audio and video connection, just click the link you used to join the webinar to re-join at any time. If you experience any other technical difficulties related to joining the webinar please contact Citrix customer support at 1-888-646-0014.

At the end of the formal program there will be an opportunity for a Question and Answer period. If you would like to submit a question, please use the question feature in the control panel. Due to limited time, we will not have an opportunity to have everyone’s question answered but please do submit. We may be able to use them in future webinars or in the Q and A column in our magazine, Tinnitus Today.

I would also like to address some other features in your control panel. You are in control of how you will view the webinar. You have the ability to make the presentation full screen or not and control where you view the webcams on your screen. You may enlarge the screen by pulling down on the notched area on your screen or pull the corners of the video. When slides are being shown the video view will become smaller, but you will see the presenter. Please take a moment to familiarize yourself with these features – they will come in handy as the program progresses.

Before we get to Dr. Mraz’s presentation I’d like to introduce you to Jennifer Born, ATA’s Program Director. Jennifer has been with ATA since 2006 and has worked for the organization in various capacities. I’d like to have her tell you a little bit more about why tonight’s topic is particularly relevant to ATA and its history.

**JENNIFER BORN:** Thank you Melanie and thank you all for joining us here this evening. As Melanie mentioned tonight’s topic is particularly relevant to ATA’s history. If you are a longtime ATA member you probably recognize the name Jack Vernon, who is one of our co-founders. Jack is credited with developing the first clinically accepted therapy for tinnitus – a sound therapy called “masking.” Dr. Searchfield will tell us more about masking and its evolution a little bit later in the program. But masking had a unique and unexpected start.

In the early 1970s Jack had just begun his research on tinnitus in Portland, Oregon. He received a call one day from Charles Unice, a physician in California
who was suffering from terrible tinnitus. Charles had learned of Jack’s research and thought that maybe he could help him.

Jack was at the beginning stages of his research and told Charles that he didn’t have anything tangible to help him at that time, but that he would keep him informed of any progress or treatments that may come out of it.

Well, to make a very long story a little shorter – Charles ended up going to Portland anyway and although Jack couldn’t help him at the time – Charles ended up helping Jack.

During Charles’ visit to Portland Jack took him out to eat. There are many decorative fountains throughout downtown Portland and one in particular – the Lovejoy fountain - happened to be outside the restaurant they went to. As they approached the fountain Charles suddenly stopped. A look of awe spread across this face. He turned to Jack and told him that standing there – next to that running water was the first time he hadn’t heard his tinnitus since it began. With a little know how – and some patient feedback from Charles, Jack was able to take that information and create the basis for the first widely accepted tinnitus treatment – masking. After that, Jack and Charles established the American Tinnitus Association so they could help all people with tinnitus and to continue to research the condition.

Sound therapy has come a long way since the early 1970s when Jack began his research, and tonight we are going to learn from two experts more about this important way to manage tinnitus. But quickly – before we get to that, I would like to poll our audience and find out how many of you have tried a sound therapy:

**Q: Have you tried some form of sound therapy?**

**Answers:**

Yes, a desktop sound generator or desktop fountain.
Yes, a wearable device that was prescribed to me by an audiologist or other tinnitus health professional.
Yes, combination devices (hearing aid and sound generators combined) that were prescribed by an audiologist.
Yes, OTHER.
No, I have not tried a sound therapy.

(Jennifer will note the answers – how many people have responded and whether or not the majority of the audience has tried a sound therapy)

Well whatever your experience has been in the past with sound therapy, I think you will learn things tonight from Dr. Mraz and Dr. Searchfield that you didn’t know before. Melanie, I turn the program back over to you to introduce our experts.

MELANIE WEST, MODERATOR: Thank you Jennifer for that brief history of ATA and our co-founders chance encounter that led to the very first sound therapy.

Now I’d like you to turn your attention to the main event. Our first speaker is Dr. Norma Mraz. Dr. Mraz is a practicing audiologist in Alpharetta, Georgia with her own private practice. She earned both her Bachelor of Arts and Master of Arts degrees from the University of Florida. She earned her Doctor of Audiology degree in 2004 from the Arizona School of Health Sciences. After 10 years practicing audiology in Florida, she moved to GA where she specializes her efforts in the treatment of individuals who are afflicted with tinnitus and hyperacusis. After studying the Tinnitus Retraining Therapy TRT treatment program with its creators, Dr. Pawel Jastreboff and Dr. Jonathan Hazell, she studied other tinnitus programs, such as masking and Neuromonics. She has published articles on tinnitus in Tinnitus Today and The Hearing Journal and has lectured on tinnitus and hearing loss at national and international conferences. I have had the privilege of working directly with Norma for the past four years on the ATA Board of Directors and I can tell you she is a pleasure to work with in addition to being extremely knowledgeable about current clinical best practices for tinnitus and hyperacusis patients. Please allow me to introduce Dr. Norma Mraz.

NORMA MRAZ: Hello everyone and Thank you Melanie for that kind introduction. For all of you new members (or viewers) … Welcome! And to all of you established supporters of ATA … Thank You for your unwavering commitment and support to this dedicated organization.
To begin my talk, I’d like to walk you through what a tinnitus and/or hyperacusis patient should experience during their first office visit to a qualified tinnitus health professional. But first, I want to clarify a simple yet important fact – there is only one common denominator with tinnitus patients and that is the word ‘tinnitus’ - after that – each of you are unique individuals. That is why a lot of what is discussed this evening covers a broad spectrum of material. Each patient has their own set of circumstances that demands the attention from their medical professional because one tinnitus approach does not fit all. Also, understand that many ear and hearing medical professionals do “see” tinnitus patients but very few actually “work” with tinnitus patients. That’s important to understand because anyone can sell a product or device for tinnitus but there is usually no follow up, follow through or proper guidance that is designed to meet your individual tinnitus needs. Sadly, the message of hopelessness is still being said by many, whether it’s said with poor medical bedside manner or even with good intentions from a family member or friend (just don’t think about it). As a tinnitus provider for 20 years (yes, I just dated myself), I have worked with many tinnitus and hyperacusis patients and not one person’s story is exactly the same. You may begin your quest by searching out tinnitus information on the internet and find yourself reading other people’s stories / experiences and for some reason internalize it as if it were your own and a host of other things but in reality many of it never really applies to you. Unfortunately, things are taken to such an extreme that the tinnitus patient find themselves pinned in a corner and scared. One of our guest speakers tonight is a patient of mine and will share her story in just a bit – but allow me to say, I met a lovely woman who walk was frightened that food would make her tinnitus worse, frail from not eating and desperate when she walked in my office clutching a large hand bag carrying every kind of tinnitus pill / vitamin or herbal remedy you can imagine, she could barely stay focused on our meeting, fortunately she was accompanied by her sister… so stay tuned … as she will finish telling you her story.

Ok – let’s get back to the first time a patient comes to my office. My first step is to understand their individual circumstances and what events may have led to their tinnitus onset. This begins by the patient filling out a detailed tinnitus questionnaire like the Tinnitus Handicap Inventory, the Tinnitus Reaction Questionnaire, or the Tinnitus Functional Index. These questionnaires are
designed to understand how tinnitus is impacting a patient’s life, the severity of
the condition on their day to day living and how they react to the perceived
sound. In addition to the questionnaire, a comprehensive audiological and
tinnitus evaluation is performed. The audiological evaluation is a hearing test
which is done to measure if the patient has any hearing loss. Afterwards, a
loudness test is done to assess sound sensitivity. An otoacoustic evaluation is
done and this measures the outer hair cell function in the cochlea which is in the
inner ear. Last but certainly not least, a tinnitus assessment is completed. The
tinnitus assessment helps quantify the perceived pitch and loudness of the
tinnitus sound. These test results are discussed in detail with the patient and
helps me determine what treatment options are best suited to address the
tinnitus.

For example, results may show a high score on the Tinnitus Reaction
Questionnaire which helps medical professionals understand how a person is
reacting to their tinnitus. This also helps in determining if they would
immediately be a candidate for sound therapy, or if a behavioral specialist should
provide counseling first, or in tandem with, a sound enrichment program.

In other cases a patient’s test results may show they have a medical condition
such as otosclerosis (hardening of the tiny bones in the middle ear) or those
whose tinnitus onset is caused by an acoustic neuroma – a tiny tumor on the
inner ear. This is usually the cause of their tinnitus and hearing loss and this
patient may be a candidate for surgery. If successful, the surgery will resolve the
hearing loss and in many cases resolve the tinnitus which is interesting because
that would be considered a ‘cure – and yes – albeit not common, there are some
tinnitus patients that can be and are cured with this kind of intervention.

But let’s focus on the majority of the tinnitus patients who are not surgical
candidates. If no measurable hearing loss is present, then a sound device – such
as an MP3 player-like device or ear level devices will be suggested. Products like
Neuromonics, Sound Cure Serenade or a Tinnitus Relief App are other examples
that may be recommended. These type of devices have sound programs pre-
programmed and patients wear the device for a certain number of hours per day.
The therapy is designed to help a patient habituate (retrain) over time. Dr. Grant
Searchfield will soon be discussing habituation in greater detail.
If tinnitus is accompanied with hearing loss as well, then hearing instruments specifically combination units – a hearing aid/sound generator device – would more than likely be recommended. I’d like to point out that hearing loss does not cause tinnitus and tinnitus does not cause hearing loss but chances are great that whatever insult or injury caused the hearing loss is probably the same insult or injury that caused the tinnitus. The group of tinnitus patients with hearing loss, may have part of their treatment program addressing both the hearing loss with the emphasis on tinnitus. A tinnitus patient may not initially be aware nor care that they have hearing loss but it is important to address b/c in many cases, when an individual begins to hear the frequencies where they have hearing loss, they tend to not perceive their tinnitus which is usually a comforting and very welcoming experience for them – let alone be able to hear and understand others with greater ease.

Hearing aids, sound generators and Combination hearing aid/sound generator devices have historically been expensive and are generally not covered by insurance, however many hearing aid manufacturers have begun to make these special devices more affordable so that help is available for everyone. New advances in hearing aid technology now allows a patient to stream nature sounds and music directly from their smart phone to their ear devices which is extremely convenient for tinnitus patients since the majority of them use a smart phone on a daily basis.

I want to quickly highlight a couple of points on habituation (again – how the brain can functionally change how it perceives stimuli (tinnitus) but as I mentioned earlier – you are in for a treat as Dr. Searchfield will be giving a brilliant discussion on how the brain processes information (in this case – sound).

The purpose of sound therapy is only one part of a tinnitus program like Tinnitus Retraining Therapy (TRT) - the other part – the MOST IMPORTANT part is directive counseling. These counseling sessions are educational and designed to help demystify tinnitus by explaining what tinnitus is and is not and to adjust your tinnitus program accordingly. Habituation can occur in 2 phases - habituation to response, meaning you hear the tinnitus but it does not bother you (you can focus) and/or habituation to perception, meaning there are periods of time you are not even aware of the tinnitus unless you listen for it.
By putting the necessary tools in place like counseling / sound therapy / medical professional it helps promote habituation. It is really important to mention that habituation cannot be forced to happen no matter how hard you try to make it happen simply because it is a subconscious event. However, being consistent in using a variety of soft, soothing, and pleasing sound repeatedly over the course of time promotes habituation – and to reiterate this experience occurs naturally, passively and effortlessly in our subconscious brain – filtering the tinnitus sound away from conscious awareness. You may ask, how much time does habituation take to occur? Well – it’s a great question – it varies for each individual. Allow me to explain.

One of the beautiful wonders of our brain is that it processes information for us all day without our conscious effort. We simply do not see, feel, taste, smell and hear everything in our environment all day – if we did, we would fail to function effectively as our brain is only capable of doing ONE important task at a time. So when incessant tinnitus is around, it is that ONE important thing that distracts us from other tasks we easily accomplished before tinnitus.

Neuroscientists have recently discovered the part of the brain responsible for the continuous sensation of tinnitus and chronic pain even long after the injury has occurred and healed – the technical term is called the nucleus accumbens – aka – the pleasure center. It is responsible for motivation, pleasure and addiction. The nucleus accumbens facilitates learning new behavior by pleasurable reinforcement. Research outcomes like this one has taught us that although sound can be positively impactful in reducing the annoyance and awareness of tinnitus – it is the sounds that you find comforting and soothing that tends to render the best results. Because of the positive associations you have with those sounds. Otherwise it would be a nuisance to you and it can quickly make tinnitus more problematic. So for some people they enjoy nature sounds like running water or the sound of wind blowing through leaves in trees. Others prefer soft music like classical or ambient genres and still others prefer and respond to traditional white noise which is broadband like a shower noise.

To summarize - there is an array of sound generators on the market today and these devices offer many conveniences but these dynamic features and ever-changing technology is only as effective as the medical professional who is
counseling and guiding you through a tinnitus management program and of course, your active participation. This affords all parties involved in your tinnitus and hearing care to understand the protocol to follow and maintain realistic expectations so that everyone’s efforts promotes the most effective outcome. We may not be able to cure everyone’s tinnitus today, but we have resources available to us that can certainly minimize the negative impact tinnitus can have on a person’s life. So please continue to support the American Tinnitus Association – we hear you and are here for you.

MELANIE WEST, MODERATOR: Thank you Dr. Mraz for that informative presentation. I know that many of our audience members have not had the opportunity to go to a doctor who knows so much about tinnitus – and I know your talk has given hope to many attendees tonight. It is good to know that there are doctors out there who do know how to help them. In fact, ATA maintains a health professional listing on our website of doctors just like Dr. Mraz who do know how to help people learn to manage their tinnitus. So if you are one of those people who has been told to “go home and learn to live with it” by a doctor – please go to ATA.org and click on “Find a Provider”

While there are other therapies for tinnitus – currently sound therapy is one of the most effective forms of treatment for tinnitus – sound therapies do not work for every single tinnitus patient. This is why ATA remains dedicated to funding research to find new tinnitus management strategies and to further optimize existing therapies as Dr. Searchfield will tell us about shortly. But before we get to that – I’d like to bring back Jennifer Born to tell us about ATA’s rich history of funding research and why it is so important that we continue to fund research in search of a cure.

JENNIFER BORN, ATA RESEARCH/MEMBERSHIP: Thank you again Melanie. Since 1980 when we awarded our very first research grant, ATA has directly contributed over $6 million in “seed” grants to tinnitus investigators around the world. Our grant program consists of funding awarded to both students and to established researchers.

Once the grants are received, a rigorous peer-review process takes place by our esteemed Scientific Advisory Committee which, as evidenced tonight - is comprised of some of the most talented researchers worldwide who are working
on understanding and developing treatments for tinnitus. Each grant is evaluated through a set of criteria to determine its merits and ability to push science forward. The proposal must also fall into one or more paths of ATA’s Roadmap to A Cure – a document created by our SAC that outlines four paths of research – two basic and two clinical – that will ultimately help lead to new treatments and cures for tinnitus. Once the grants are reviewed and scored, the top-scoring proposals are then forwarded to our Board of Directors for funding consideration.

As Melanie mentioned, all of ATA’s ability to fund research comes from the generosity of our members and donors which consist almost entirely of individuals. That’s something that every ATA member should be proud of. So to those of you here tonight who are ATA members, thank you for your support of the research we have funded and for supporting our programs like these webinars.

For those of you here tonight who are not members, we invite you to join us. By becoming an ATA member you are directly supporting research that is leading to new treatments and cures for tinnitus. You will also get the added benefit of being able to see ATA’s exciting 2016 line-up of webinars which is included in the price of your annual membership donation. You will also receive *Tinnitus Today*, our magazine that is published three times a year which includes the most up-to-date information on tinnitus, research and treatments, patient stories and Questions and Answers with tinnitus health professionals. We have included the current issue of the magazine as a handout – you can click on your control panel at the bottom where it says “Handouts” and download the magazine at any time during this webinar. By becoming a member you also gain access to the Members section on our website which has 30+ years’ worth of archived *Tinnitus Today* magazines, the Progressive Tinnitus Management Program and an archive of all ATA’s webinars that you can watch at any time. Membership is just $40 annually and can be done easily online at ATA.org.

We look forward to continuing to work together with all of you toward a future without tinnitus.

Melanie, I’d like to turn the program back over to you to introduce our next speaker.
MELANIE WEST, MODERATOR: Thank you Jennifer for all that great information about ATA’s programs. It is true that our members are and have always been the backbone of this organization. So I would also like to extend my thanks to all of you.

Now we turn our attention back to sound therapy but this presentation will be focused a little bit more on why sound therapy works and the auditory neuroscience behind it. I would like to introduce you to Dr. Grant Searchfield who is a new member of ATA’s Scientific Advisory Committee. Dr. Searchfield completed his Doctorate in Audiology at The University of Auckland in New Zealand and he is currently an Associate Professor there in Aural Rehabilitation. He is Director of the University’s Hearing and Tinnitus Clinic. Dr. Searchfield is also a member of the Scientific Committee of the Tinnitus Research Initiative and leads a working group focused on the use of perceptual training as a tinnitus treatment. Dr. Searchfield is Editor at Large for the International Journal of Audiology and an international editorial associate for the Journal of the American Academy of Audiology. His research focus is on cognitive processes involved in tinnitus perception and the development of innovative technology for tinnitus treatment. Dr. Searchfield I turn the program over to you.

GRANT SEARCHFIELD: Thank you Melanie and thank you all for your interest in this program tonight. We have had a very interesting talk by Dr. Mraz about the clinical use of sound therapy. I am going to continue on in a similar theme but with more of a focus on how sound might achieve its effects. I hope to unlock some of the puzzles of sound therapy for you. It would take many days to discuss all the effects of sound so I am going to concentrate on several general types of sound therapy. Tinnitus is a complex problem involving the ear and many areas of the brain, it is a very individual problem differing from person to person.

When we hear sound activity from the ear travels a complex path through different processing stations to reach the brain. Each of these centers plays a role in hearing sound, from simple processing to making sense of the information. In this way tinnitus can involve many processes and combine with a person’s memories, emotions and thinking.
Following changes in our ear activity our brain tries to correct for errors, in doing so it creates new activity which the brain hears as sound. This picture shows activity from a processing station in the brain in an animal without tinnitus (top) and with (bottom) showing an increase in neural noise.

The hearing part of the brain is also crucial for hearing tinnitus. The appearance of an annoying sound coupled with its emotional effects means that attention is involuntarily drawn to listen to tinnitus. Unless that is addressed we become better and better at hearing tinnitus.

The hearing part of the brain does not operate separately from other parts of the brain. Recording of brain waves and imaging of the brain in animals and persons with tinnitus shows that the auditory cortex (brown) has links with parts of the brain involve in the sense of touch (grey) and processing of different senses (blue), the importance of sound (yellow) and memory (green).

This tinnitus network need to be stimulated (exercised using sound) otherwise tinnitus will be heard.

Different sounds may work in different ways to help tinnitus. What is best for one person, may not be best for another. In general terms Sound therapies work by getting the brain to refocus on and become accustomed to new sounds. At our university clinic we divide sound therapy into four different types, there is a lot of overlap, and no hard and fast rules:

Interference – masking

Relaxation

Attention diversion

Adaptation

Sound therapy can train the brain to ignore the tinnitus, this is sometimes described as taking advantage of "plasticity" or "rewiring" of the brain.

Often the first reaction to tinnitus is “I just want it gone”. There is a sense that we can no longer control the sounds we hear and we can’t escape.

Using sounds that interact strongly with tinnitus making it difficult to hear can provide a sense of control and relief. Noise or constant sounds like rain are used.
The benefits of using sound to cover or partially cover tinnitus has been known for centuries. A comfortable sound can be used to replace or reduce the clarity of tinnitus.

Prolonged persistent exposure to sound may change neural circuits and reduce their response to tinnitus. Because different levels and types of sounds can replace the tinnitus, masking can provide the user with some control over what they hear.

Informational masking works by the information in the sound interfering with processing of the tinnitus in the brain. It does not cover the tinnitus instead the brain can’t detect the tinnitus because the sound “confuses” the tinnitus with true sound.

Sound can have a strong effect on emotions, for example sad and happy music, correct sounds can reduce stress and even reduce pain! We recommend use of relaxing sounds at times when tinnitus is making you feel tense, before and during sleep. Most of us have favourite types of music to relax to and in many cases we can have a strong emotional response to certain sounds, or songs, this may be linked to warm memories of the past, or situations where we have been really chilled out, for example a summer holiday relaxing by the sea.

This can be helped by mental imagery. Mental imagery training can be used to evoke strong positive sensations associated with tinnitus such as imagining tinnitus as if it were rain, surf or a waterfall. Let the tinnitus become one of the sounds around you not separate from the environment but a real part of the environment, another background sound.

A characteristic of human auditory-perception is that we can really only concentrate on one sound or one group of sounds at a time. If we focus on a particular sound other sounds recede into the background. We can use this to make tinnitus less the centre of attention. The auditory system seems to make a special case of listening to tinnitus, possibly because it is such an unusual sound.

We need to train the auditory system to reduce this inward tinnitus focus and instead focus on the outside world.

Our sonic environment or soundscape is so interesting, attending to natural sounds around us can help relegate tinnitus to being unimportant.
The goal of this training is to direct focus to sounds around us. These sounds are a listening exercise (like going to the gym to exercise your hearing brain) that try and teach the brain to listen to more useful sounds than the tinnitus.

Adaptation is the psychological and perceptual accommodation of tinnitus is such a way that the brain becomes so accustomed to the tinnitus that it no longer pays attention to it. Research on physiological aspects of attention has shown an asymmetry in neurological arousal, with respect to the direction of stimulus change. Decreases of sound intensity level draw less attention than equivalent increases in evoking listeners' attention. The process of adaptation involves increasing the strength of our own ability to filter out tinnitus by reducing levels of sound therapy.

Adaptation can be the end result of all sound strategies.

It takes time, but may involve changes in the way the areas of the brain are wired.

This shows the outcomes of a trial of combination devices we were involving my group and Luca del Bo’s team in Italy, showing the benefit of combination instruments over time. It is my belief that two separate processes are shown.

1. An perceptual contrast effect from masking which results in a reduction in perceived audibility and then

2. Another phase of psychosocial adaptation.

In the last few years there has been an explosion of new sound therapies available. Here I am going to talk about two ideas my team and I have been working on.

When people hear tinnitus, sometimes they hear it in one ear or another, sometimes it is in the head. This angry face represents tinnitus. Often people can localize where in or around the head they hear tinnitus.

Normally when we use sound (in both ears) it is heard as if coming from the center of the head, that is the masking sound and where tinnitus is localized to appear separate, making tinnitus easy to hear – even with the sound present.

We have developed a method of tinnitus masking using 3D audio, meaning when can make the masking sound cover the location of tinnitus improving the efficacy
of masking. We are carrying out more research on this method with assistance from a research grant from ATA.

Because of digital recording technologies and widespread availability of iPhones and other smartphones we have lots of different sounds we can use as therapies. This study, again a collaboration between NZ and Italy, found that noise and nature sounds have similar effects, but the benefits of nature sounds continue to grow over time.

We have taken the learning's from our research and 15 years of the University of Auckland Hearing and tinnitus clinic to develop an online treatment system for patients and clinicians to use.

You’ll find examples of treatment sounds and more about what I have talked about on www.tinnitusstunes.com

That brings me to the end of my formal talk, but I look forward to answering any questions you may have in the Q and A portion just ahead. Melanie, back to you.

MELANIE WEST, MODERATOR: Thank you Dr. Searchfield for that detailed explanation of how sound therapy works for tinnitus patients and some of the sound management strategies you have been directly involved with developing. For those of you in the audience tonight who have perhaps tried a sound therapy – maybe long ago and didn’t have optimal results - I hope you are encouraged by what Dr. Searchfield and Dr. Mraz have presented here tonight – and you will consider trying sound therapy again, with all the new information available to clinicians.

Plus, we want you to stay tuned for the upcoming ATA webinars where we will keep you informed of new studies and treatment options. Later in the program we will give you a preview of the topics for this next year.

Now I’d like to introduce you to an ATA member – someone who has been through the trials of tinnitus and who has come through on the other side. For some people with tinnitus they still haven’t found a treatment or therapy that works to help them – and that’s why ATA continues to fund research toward new treatments and cures. But there are some who have – and in this case it was through a sound therapy program with Dr. Mraz. I’d like to introduce Connie
Decker, an ATA member, a grandmother of seven (soon to be eight!) and patient of Dr. Mraz who is here to share her journey with tinnitus with all of you.

**CONNIE DECKER, TESTIMONIAL:** Although it is hard to say for sure, my tinnitus journey most likely began with a horseback riding accident in October 2009. For months afterwards I noticed unusual noises in my ears, and then one morning I suddenly awoke to very loud ringing sounds. I jumped out of bed and poured peroxide in my ears hoping it would stop, but it didn't.

Pharmacists and the internet gave me no hope! My husband Pete took me to various doctors. One asked why I was making a big deal out of the tinnitus because it wasn't going to kill me. I never went back to that doctor. The ENT who had tinnitus himself said there was no cure or treatment. I would have to live with it.

Very quickly, Tinnitus began to negatively impact every part of my life. I couldn't sleep or eat. I was a wreck! Losing weight at an alarming rate because I was afraid food would make my tinnitus worse. My entire family saw that I was deteriorating physically and emotionally. I was thin, pale, and frail by most accounts. Pete was afraid I was going to starve myself to death. My daughter kept saying, "I want my mama back."

When my tinnitus began, I had two grandchildren and another on the way. I certainly didn't want my legacy to my children and grandchildren to be their mother and grandmother starved herself to death because I couldn't handle tinnitus.

At a dental appointment in 2010, my very concerned dentist found out I had tinnitus. He immediately contacted a friend and colleague who also had tinnitus and had been a patient of Dr. Pawel Jastreboff at Emory University Hospital. When I called Emory, I was referred to Dr. Norma Mraz.

October 2010, I walked into Dr. Mraz's office accompanied by my sister, Laura Ann, and I immediately became filled with hope. She spent a long time with us finding out what had been going on in my life, explaining tinnitus, the Tinnitus Retraining Therapy, and hearing aids with sound generators. FINALLY – someone had answers for me – and sympathy. I knew I was NOT leaving her office without purchasing the hearing aids and signing up for TRT.
Dr. Mraz had my hearing aid in two days! When my sister and I do anything fun and adventuresome, we call ourselves Thelma and Louise; therefore, I named by tinnitus hearing aids Thelma and Louise.

Thelma and Louise have allowed me to live with tinnitus. I never thought in those first few months of having tinnitus that I would ever enjoy life again. As my sister said, I am a Dr. Mraz success story.

After a few months of therapy, Pete was able to attend my last TRT session. Dr. Mraz spent a lot of time educating him about the therapy and hearing aids. I asked him many times if he had any questions, but he was unusually quiet. Finally, he looked at Dr. Mraz and said, "Thank you for giving my wife back to me."

**MELANIE WEST, MODERATOR:** Connie’s participation in this webinar is dedicated to the memory of her husband Pete, who passed away unexpectedly, just one year after she started TRT. He was her rock, and savior in the whole ordeal and Connie wanted us to convey that she would likely not be here today if it hadn’t been for his concern and love. Thank you Connie for that moving account of your tinnitus experience.

As we have learned tonight – sound therapy is currently the best way for people with tinnitus to find some relief. Your story also highlights the importance of making sure you talk to others about your tinnitus as well as find a qualified medical professional when seeking tinnitus care.

And now it is time for the Question and Answer portion of the evening. We are going to bring back up all of our speakers so that any question you have – whether regarding the research segment, or something specific about ATA can be answered accordingly. While we are doing that I just wanted to remind you that to submit a question, you need to use the question feature in your control panel. Please be sure to include who your question is for when you send it in. I will read each question aloud and then direct it to the appropriate individual on our panel.

**QUESTIONS:**

We have time for one more question – if your question wasn’t answered please be sure to attend the next webinar as it may be one that is answered by another
presentation or speaker, or we may use them in future issues of *Tinnitus Today*. Ok – the last question is……

**MELANIE WEST, CLOSING REMARKS:** I want to thank you all for attending our webinar tonight on sound therapy. I hope you learned as much as we all have and that you have taken away from this webinar the importance of using sound to help manage your tinnitus.

Our next webinar will be on March 15, 2016 and that webinar will feature Dr. Michael Hoffer, an M.D., from the University of Miami and Dr. Jim Kaltenbach, Ph.D., from the Cleveland Clinic, who will discuss Pharmacology and what drugs have been tested and are being tested for tinnitus. This is an area of research that is progressing and a webinar you won’t want to miss. Registration will be available for that webinar soon at ATA.org. But, attendance is limited, so register early. In the meantime, go to ATA.org and check out the list of speakers for 2016 or refer to the back page of *Tinnitus Today*. If you are not a member, please consider joining and enjoying these valuable benefits.

Also, I want to thank our presenters again, Dr. Norma Mraz and Dr. Grant Searchfield for volunteering their time and expertise on sound therapy and clinical practices. We are truly fortunate to have had them with us here tonight.

Thank you again for joining us and we hope we will see you in March at our next webinar!