Tinnitus is a lousy deal and a continuous struggle. And for many of us those are understatements. Without help and understanding from our families and friends, and the medical and research professions, tinnitus would control our lives. For many with tinnitus in the absence of a cure, it does tend to control much of our lives, and so we keep struggling.

This struggle leads many to the American Tinnitus Association. I know my personal struggle did.

My colleagues on the ATA Board of Directors and staff of ATA know how those of us with tinnitus fight each and every day. We know and are humbled by the personal courage of those we meet with tinnitus. This knowledge keeps ATA focused – with our eyes on the prize – on the goal of finding a cure for tinnitus.

We know that tinnitus is a complex phenomenon; that a treatment approach that helps one person does not always help others in the same way, if at all. We also know that tinnitus arises from a variety of circumstances and ATA’s Roadmap to a Cure reflects this diversity in each of its four paths.

Since I initially came on the ATA Board in 2003, ATA has made enormous progress in raising the awareness of tinnitus with national policymakers and in funding scientifically-rigorous research based on the Roadmap. We have accomplished this through the advice of the world’s best tinnitus researchers on ATA’s Scientific Advisory Committee.

We are committed to continuing those efforts.

Going forward, we will be fine-turning ATA’s organizational and communications model to better reflect the emergence of the Internet as a feature of our lives. Most people now turn to the Internet for information and to identify groups like ATA that share a dedicated interest in solving a particular problem. ATA will remain an excellent primary source for information on tinnitus but we want to do more – much more – to develop the resources to permit us to fund even more research and sustain our federal advocacy program.

We will be unapologetic in those efforts. Our operational goal is to increase contributions to ATA for these purposes. We are in it for the long haul and we intend to persevere in this fight.

As we move forward, like any other organization, ATA will experience other changes. For example, for the first time in almost a decade, my predecessor as Chair of the ATA Board, Gary P. Reul, Ed.D., is not helping to lead our organization. Gary, a retired education executive from Issaquah, Washington started out as a Board member, and then when circumstances required it, stepped into the day-to-day management of the organization as CEO. Ultimately, he served as our Board Chair. With the exception of Jack A. Vernon, Ph.D., few people have sacrificed as much for ATA as Gary has in recent history.

Others, good friends all, have departed our Board and new volunteers have stepped forward to serve.

As Board Chair, I want to assure you that ATA moves forward with a sound financial foundation. With your help, we can add to the amounts allocated to research projects each year and expand our programs and presence both on the Internet and in other communities. Our net worth is now stable and growing and we plan to stay the course to ensure the future of this great organization.

I would hope that when you receive a request from ATA to contribute to our mission, you will see it as a clear opportunity to make life better for everyone with tinnitus. I know I do.

Mark K. Johnson, J.D.
Chair, ATA Board of Directors
Reflections from ATA’s Executive Director on FY 2011-2012

Each year at this time, I have the opportunity to report back to our current donors, while informing our prospective donors, about the important programs put forth by ATA and the impact they have on our efforts to find a cure. While an annual report can often evoke images of numbers, dollar signs and charts, it’s an important document because it’s our way to demonstrate that we’ve responsibly utilized your essential donations as we’ve promised in the most efficient ways to advance our mission. We also use this as an opportunity to highlight the individuals who have gone above and beyond for ATA in various ways over the past year.

One of the biggest services ATA provides is information. The first contact an individual may have with ATA will most often be for information about tinnitus and a desire to find out what can be done about it. Our website, ATA.org, is a great way that those information seekers can learn about treatment methods, the current state of research funded both by ATA and other entities, and provides a connection with others through our Support Network and social media pages who are going through the same harrowing experience. It is my hope that these individuals get the help and information they need and return the favor to others, thus helping ATA in its mission.

Some of the most important work we do is through our advocacy program. While we work extremely hard to directly fund research ourselves, we also complement that effort through working with government agencies who are able to fund high-quality and more expensive multi-year grants. Our Board of Directors, Scientific Advisory Committee (SAC), staff and advocates work tirelessly to make the right connections on Capitol Hill and continually seek new opportunities – to ultimately get more tinnitus research funded. This past year in particular, the Office of Naval Research committed close to $2 million for tinnitus-specific research to two very deserving investigators. We’ve highlighted some of our advocacy milestones reached during the past fiscal year in the following pages.

Perhaps the most important work we do is directly advancing the science behind tinnitus. There is no way to understate the importance of ATA’s research program and how it drives our mission. When SAC reviews the proposals submitted by investigators, and when our Board votes on what to fund, we are looking at where the existing gaps in research lie and where the unanswered questions on tinnitus are. ATA’s Roadmap to a Cure is the blueprint that guides this decision-making. The results and data obtained from many of the research grants ATA funds are then taken to larger institutions like the National Institutes of Health or the Department of Defense so that they can be expanded upon, which is helping us get to our ultimate goal of restoring silence to the millions who suffer.

I’d like to close by thanking ATA’s hard working board, scientific advisors, staff and members for all we’ve accomplished together in the last year. None of what we share in this report would be possible without all of your efforts. If we continue to work together and increase our numbers in both volunteers and donations, we will ultimately have greater impact, and someday we will live in a tinnitus-free world.

Again, thank you all for your contributions.

Sincerely,

Michael Malusevic
ATA Executive Director

The American Tinnitus Association has 501(c)(3) status as a nonprofit organization; all contributions are tax-deductible as allowed by law. ATA is a member agency of the Health Medical Research Charities of the America Federation for the Combined Federal Campaign (CFC). We appreciate those donors who choose the CFC to make direct contributions to ATA by indicating #11030 on their workplace giving form, or when necessary, simply writing in, “American Tinnitus Association.”
ATA-Funded Research FY 2011-2012: Thoughts From the Chair of SAC

In the present environment where research funding is getting harder to secure from traditional governmental sources, ATA continues to be a beacon of light in the area of supporting tinnitus research. Most importantly, we are extremely fortunate to receive high-quality proposals from top researchers from across the globe. In March 2012, ATA’s Scientific Advisory Committee (SAC) discussed grants deemed innovative and worthy of support. Their votes, careful evaluation, and due deliberations were forwarded to ATA’s Board of Directors (BOD) for the final funding decision. It should also be emphasized that the scores on the standard reviews for the grants this past cycle were very tight. So those not getting funding should clearly consider resubmitting in the next round.

Keep in mind, each grant is required to provide which of four paths of ATA’s Roadmap to a Cure it encompasses. These general paths are noted below.

Path A: Identification of Tinnitus Generator(s)
Path B: Elucidation of Mechanisms of Tinnitus Generation
Path C: Development of Therapy
Path D: Optimization of Therapy

For the FY 2011-2012 funding cycle, the BOD approved grants in one special research category, two grants in the standard research category, and one grant in the student research category.

Special Grant Consideration

The special category consisted of one research project completely funded by Walter and Lucille Rubin, philanthropists who earmarked their donation for a specific investigator. The BODs entertained this request but would only approve the proposal if the earmarked researcher had the proposal reviewed and approved by three SAC members. To be clear, this was not an “ex parte” decision but one where consensus was needed by SAC reviewers and secondly, that the grant proposal score needed to exceed the standard threshold for consideration of funding. Therefore, if the proposal exceeded the threshold, then it would receive approval.

As a result of the review process, this special consideration grant was awarded to Berthold Langguth, M.D., Ph.D., University of Regensburg for the project entitled: Combined Transcranial Magnetic Stimulation in Treatment of Chronic Tinnitus Using Double Cone Coil. The Rubins selected Dr. Langguth for his important contributions and continued innovative work in the field of tinnitus research related to brain modulation. This grant seeks to improve the amount of benefit afforded by repetitive Transcranial Magnetic Stimulation (rTMS) using a special double cone coil by down regulating increased neural activity in auditory cortex and modulating deeper brain structures involved in generating feelings of suffering.

Standard Submissions

The first standard grant was awarded to Jennifer Melcher, Ph.D., Massachusetts Eye and Ear, Harvard Medical School for the proposal entitled: Brain Function and Attention in Tinnitus. This project explores whether brain processes of selective and involuntary attention are different in people with tinnitus and uses behavioral (dichotic listening) and functional magnetic resonance imaging (fMRI) to evaluate effects. It is suggested that such results may help to improve therapies that focus on attention-training exercises as a way to reduce the burden of tinnitus on individuals.

The second grant was awarded to Josef Rauschecker, Ph.D., Georgetown University Medical Center for the project entitled: Tonotopic Map Reorganization and the Effects of Frequency Discrimination Treatment in Tinnitus. This proposal will examine the tonotopic map reorganization hypothesis for tinnitus generation which will use 1) fMRI to examine tonotopic maps of tinnitus subjects vs. controls matched for hearing loss; and 2) will seek to determine the neural sites-of-action of sound therapies (frequency-discrimination training) over a 30-day period. This proposal has both theoretical relevance and practical value.

Lastly, one of the more important categories of grant awards that ATA funds are the ones that are given to students. They represent the future for research in this area and when coupled with a capable advisor/mentor, foster excitement of the research process and potentially add invigorated investigators to the field. We funded a student grant proposal from Sarah Hayes, University of Buffalo entitled: Contribution of Stress to Tinnitus Generation: Role of GABAergic Inhibition. This study will examine how stress-induced changes in GABAergic inhibition contribute to tinnitus generation which in turn may lead to better therapies to prevent and treat tinnitus. Ms. Hayes will be mentored by my predecessor, Richard J. Salvi, Ph.D., former chair of SAC.
Berthold Langguth, M.D., Ph.D.  
University of Regensburg  

Project: Combined Transcranial Magnetic Stimulation in Treatment of Chronic Tinnitus Using Double Cone Coil  
Roadmap to a Cure Paths: C, D  
Funded: $50,000, 1-year project  
Type: Human research study  

Dr. Langguth: “It is well known that tinnitus is related to increased activity in central auditory pathways. Repetitive transcranial magnetic stimulation (rTMS) is an innovative method for locally modulating brain activity. With the idea to down-regulate increased activity in the auditory cortex, rTMS has been introduced as a new treatment for tinnitus. Reduction of tinnitus by rTMS has been demonstrated in many studies, unfortunately the overall benefits from this treatment are only relatively small.

In the last few years additional brain areas have been identified, which are strongly connected with the auditory cortex in tinnitus patients. These neural networks reflect the adverse emotional reaction (i.e., the suffering caused by the sound perception) and the conscious perception of tinnitus. With the aim to attack tinnitus more efficiently we propose a new stimulation protocol using a newly developed TMS coil. The specific form of this coil allows a deeper penetration depth of the magnetic field in the brain and offers the possibility to directly modulate deeper brain structures which are known to be involved in generating feelings of suffering. This proposal addresses Roadmap Paths C and D and will hopefully lead to a new effective form of treatment for tinnitus patients.”

Jennifer Melcher, Ph.D.  
Massachusetts Eye & Ear, Harvard Medical School  

Project: Brain Function and Attention in Tinnitus  
Roadmap to a Cure Paths: A, B  
Funded: $49,983, 1st year of 2-year project  
Type: Human research study  

Dr. Melcher: “There are multiple aspects of attention controlled by different parts of the brain. For instance, we sometimes pay ‘selective’ attention to a particular thing – someone’s voice, for instance – or one’s tinnitus. The focus of attention can sometimes be controlled voluntarily or it can be involuntarily captured, for instance by someone calling your name or, again, by tinnitus. This project begins to examine whether the brain processes of selective and involuntary attention are different in people with tinnitus and if so, how. There are already researchers working on tinnitus therapies that involve attention-training exercises. Our hope is that this project shows ways to improve on these therapies, perhaps by showing which aspects of attention need shoring up. The research seeks to understand brain processes underlying the condition of tinnitus and thus intersects paths A and B in the ATA Roadmap. By working directly in people with tinnitus and on an aspect of tinnitus that is being targeted by therapies, this project also has a clear eye toward path C.”

Josef Rauschecker, Ph.D.  
Georgetown University Medical Center  

Project: Tonotopic Map Reorganization and the Effects of Frequency Discrimination Treatment in Tinnitus  
Roadmap to a Cure Paths: A, C, D  
Funded: $50,000, 1st year of 2-year project  
Type: Human research study  

Dr. Rauschecker: “The research project overlaps with Paths A, C, and D of the Roadmap. It addresses the question of whether tonotopic map distortions occur in all cases of hearing loss, or only in tinnitus patients. While tonotopic map distortions are a proposed source of the tinnitus signal, to date there is no direct evidence that such distortions occur exclusively in tinnitus (Path A: Identification of Generators). Second, the project investigates the efficacy and neural sites of action for acoustic-behavioral therapy, which has shown some success in alleviating tinnitus. Our proposed treatment variation (specifically targeting low frequencies) has never been tested and can therefore be considered ‘Development of Therapy’ (Path C). Finally, the combination of pre/post-treatment fMRI and treatment success measures will identify the neural sites of successful treatment, and will thus serve as a guide for further refinement of the treatment (Path D).”

Sarah Hayes  
State University of New York at Buffalo  

Student Research Project: Contribution of Stress to Tinnitus Generation: Role of GABAergic Inhibition  
Roadmap to a Cure Path: B  
Funded: 1-year student grant, $10,000  
Type: Animal research study  

Ms. Hayes and mentor Richard Salvi, Ph.D.: “Although the majority of tinnitus patients suffer from hearing loss, not all individuals with hearing loss develop tinnitus. This discrepancy emphasizes the need to better understand factors that may increase the susceptibility of individuals to tinnitus generation. One such factor may be chronic stress and its effects on GABAergic inhibition. Although clinical observations and subjective reports from tinnitus patients suggest a link between stress and tinnitus, they provide only anecdotal evidence that stress may contribute to tinnitus susceptibility. Understanding the contribution of stress to noise-induced tinnitus may help identify individuals at increased risk for developing tinnitus and may lead to novel preventative and treatment strategies.

This proposal addresses Path B of ATA’s Roadmap to a Cure (Elucidation of Mechanisms of Tinnitus Generation). The goal of the experiments is to better understand how factors such as stress contribute to tinnitus generation by altering GABAergic inhibition along the auditory pathway. A better understanding of how stress-induced changes in GABAergic inhibition can contribute to tinnitus generation, can lead to future development of therapies to prevent and treat tinnitus (Path C, Development of Therapy).”
Fiscal Year 2011-2012 In Review

Take a journey with us through our last fiscal year to see some of the activities and achievements ATA has enjoyed all with one focus: To find a cure for tinnitus.

During the summer months it was all about research – the core of ATA’s mission. ATA put out its annual research issue of Tinnitus Today focusing on the history of tinnitus research to date and also focused on current breakthroughs by attending the Fifth International Tinnitus Research Initiative Conference held in Grand Island, New York where ATA was presented with an award for its advocacy work.

ATA Executive Director Mike Malusevic takes ATA to the national stage with the filming of a SpotlightON public service announcement which aired on PBS stations throughout the country with the goal of educating the general public about tinnitus, and ATA’s work toward a cure.

During the holiday season ATA held an online celebrity memorabilia auction featuring donated items from ATA supporter and jazz guitar legend Al Di Meola (signed guitar), MLB’s Oakland Athletics (signed Moneyball package), and NFL legend Gale Sayers (signed football and collector card) to name a few. The auction helped raise over $4,000 to support ATA’s efforts to silence tinnitus.
The U.S. Congressional Hearing Health Caucus in conjunction with ATA and other hearing-health organizations held a briefing on tinnitus; specifically focusing on tinnitus as the leading service-connected disability for veterans from all periods of service. Col(s) Mark Packer, M.D., Director of the Department of Defense Hearing Center of Excellence and Lucille Beck, Ph.D., Chief Consultant and National Director for Audiology and Speech at the Office of Rehabilitation Services, Veterans Health Administration presented to a standing-only room of Members of Congress, legislative aides and other stakeholder groups.

ATA ended its fiscal year focusing once again on the core of its mission: research. ATA held its annual Jack Vernon Walk to Silence Tinnitus in Portland, Oregon the same week that the international tinnitus research community was meeting in Bruges, Belgium for the Sixth International Tinnitus Research Initiative Conference, where ATA was represented by Board member Scott C. Mitchell, J.D., and Scientific Advisory Committee Chair, Anthony T. Cacace, Ph.D. (pictured, top right).

ATA raised awareness all spring long with the Tour de Tinnitus – a bike riding fundraiser that included rides in Florida, Missouri, Oregon, Washington, New England and Canada. During Tinnitus Awareness Week, ATA honored its 2011 Senate legislative champion, James Inhofe (R-OK).

The second annual AZ Walk to Silence Tinnitus events took place in Phoenix, Arizona. In addition to the Walk which raised over $18,000 – the volunteer group of audiologists, audiology students, tinnitus patients and other tinnitus health professionals also planned and executed a kick off cocktail party sponsored by Oticon and held a raffle where over 150 prizes were donated by local merchants. ATA Board members and staff also descended on Phoenix to help with the Walk effort.