## Homage to Prof. Dr. Abraham Shulman: Tinnitus—A Life with Tinnitology

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his issue of the *International Tinnitus Journal* is dedicated in part to the Proceedings of the Pre-Congress of the Twenty-Fifth Ordinary Scientific Congress of the Neurootological and Equilibriometric Society (NES). The pre-Congress, entitled *Tinnitus*, was an homage to Prof. Abraham Shulman, M.D. From its inception, this journal was envisioned as a first source of information for both clinical specialists and general practitioners who deal with tinnitus patients. The overall goals of the *International Tinnitus Journal* that were stated simply in volume I, issue 1, June 1995, by the coeditors, were and remain as follows:

To publish peer-reviewed manuscripts that are recognized to be informative, innovative, and original, specifically on the subject of tinnitus.

To publish articles from professionals that are of interest to all who evaluate and attempt to treat tinnitus, regardless of clinical specialty.

To focus on the needs of patients by encouraging authors to submit manuscripts that attempt to understand basic mechanisms of tinnitus production and their clinical applications, for both diagnosis and treatment. Above all, the highest priority will be to attend the needs of the tinnitus patient. The study of tinnitus belongs to the patients and professionals, in that order.

To provide a forum for the exchange of ideas and to create an environment conducive to learning for both the professional and the tinnitus sufferer.

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This article was presented at the pre-Congress meeting on March 19, 1998, which preceded the Twenty-Fifth Ordinary Congress of the Neurootological and Equilibriometric Society, March 19–22, 1998, Bad Kissingen, Germany.

To these ends, several of the presentations from the pre-Congress *Tinnitus* are published in their entirety. Abstracts of all the papers presented are included in this issue.

We are here today to pay homage to Dr. Abraham Shulman and to honor him for his contributions to the field of tinnitology, starting in 1977 and still ongoing. It is a great honor and privilege for me to introduce the guest of honor.

This morning I would like to share with you some of the highlights of Abe's life and his career. Abe's parents instilled in him a desire for education and helped him to realize his objectives at great sacrifice. He is a graduate of the College of the City of New York. He received his medical degree from the University of Berne, Switzerland, Faculty of Medicine, in 1955.

As a student in Switzerland, Abe's dissertation was on laryngotracheobronchitis. From this experience, he learned that one must respect the literature of the past and that one always has to work as part of a team in medicine.

He has applied this to tinnitus, a subjective idiopathic complaint, developing a medical audiologic tinnitus patient protocol that involves a multidisciplinary team. The team approach allows for freedom of expression and ideas and an open exchange within Abe's specialty and with several other specialties. There is no one-way; one must be open to change for the benefit of the patient. Abe is a physician who always puts his patient first and then looks for the best way to help each patient, adhering to the tenet always to remember to do no harm.

Abe can be proud of the positive effects the development of the team approach has had for the tinnitus patient, both for accuracy of diagnosis and for treatment. Abe has always been more than generous in his "sharing of information" with colleagues worldwide, as demonstrated by this twenty-fifth meeting of the NES.

In 1957, Abe began his residency training program at the Kings County Hospital, division of otolaryngology, in Brooklyn, New York. It was at this time that he met and married his beloved wife of 40 years, Arlene, whose love, support, and intelligence created a rich home life with two wonderful daughters. This gave Abe

a quiet mind—the key to being able to turn out such a body of work and to express his ideas; the security to wander intellectually and to explore the globe physically. I have known Abe and Arlene for approximately 27 years and have rarely seen such a devoted couple who respect and love each other and who share that with their family and friends as well.

This honor that Abe is receiving today is definitely to be shared with Arlene. Despite Abe's devotion to his profession, he always makes time for his friends and family. He is a friend one can count on in times of need.

Following graduation in 1960, Abe completed a fellowship with Julius Lempert at the Lempert Foundation. It was at the time of the stapes operation, an experience that had a profound, lasting effect on Abe: an opportunity to have met such greats as VonBekesy, Rosenwasser, Weaver, and Lawrence, to name a few.

From 1960 to 1962, he served his country as lieutenant commander in the United States Naval Reserve as chief of otolaryngology at the Portsmouth Naval Hospital.

His training has been in all aspects of otolaryngology, with particular emphasis since 1969 on otologyneurootology. In 1975, he was recruited to serve as acting director of the division of otolaryngology at the SUNY-Downstate Medical Center, New York, by Samuel Kountz. This gave Abe the opportunity to get involved with the cochlear implant. He did his first cochlear implant with his colleague and friend Dr. Erwin Rock, and I was privileged to be the audiologist in charge of the rehabilitation-habilitation. The further development of the cochlear implant program was not possible, due to the economic realities of the population we were serving and the high cost of the procedure, which was not covered by any medical insurance in those days. It was then that Abe and I decided to concentrate on tinnitus to continue our interest with electrical stimulation of the auditory system for deafness.

Abe's efforts as acting director from 1975 to 1980 and director from 1980 to 1985 of the Director of Otolaryngology and Center for Communication Sciences at the Health Science Center at Brooklyn contributed to the establishment of the department of otolaryngology and the opportunity to develop his clinical research interests. In his capacity as director, Abe became associated with Roger Cracco, director of neurology, and Thomas Milherot, director of neurosurgery, and they shared the stimulation and aggravation of residents and medical politics. But Abe, being an optimist, recalls it mostly as stimulation. Abe is most proud of being a clinician first, a clinical researcher second, and an educator third. He feels it is important to know one's limitations and when to ask for help and advice.

It should be said that Abe is an ear, nose, and throat surgeon as well and is currently in charge of the residency training program in otology at Kings County Hospital. Since he is so well-known as a neurootologist, many of his colleagues and patients forget that he is a surgeon, still performing surgery routinely. As a surgeon, Abe believes that the highest level a physician can attain in treating a patient is using "hands as well as intellect."

Abe has always been, and continues to be, at the fore-front of his profession—almost a visionary—never afraid to try new techniques, never shying away from exploring new fields of science, and never lacking for new ideas, always with the goal of helping his patients. I have known Abe since 1965, when I was a young, very young audiologist working at the Albert Einstein College of Medicine, assigned to Lincoln Hospital where Abe was chief of otolaryngology. At this time, he also had a very large, successful private practice in Astoria, Queens. I worked part-time in that office with him back then.

His interests were in diseases and surgery of the ear, nose, and throat, and he became increasingly interested in hearing and balance disordersand then came tinnitus. If my memory serves me, we became especially interested in tinnitus in 1977, when Jack Vernon started to work with wearable tinnitus masking devices. Off I went to Portland, OR, to visit the University of Oregon and learn about masking devices, at Abe's insistence. We then started to work with masking devices, developing our own diagnostic protocol.

In 1979, Abe organized the First International Tinnitus Seminar—an undertaking of heroic proportionssearching and tracking down scientists, physicians, audiologists, and others who had done landmark works in the field of tinnitus, works that have been largely ignored if not forgotten, works that were isolated and lost in journals past. He enlisted such notables as Ellis Douek, Harald Feldmann, Jean Marie Aran, Jack Pulec, Juergen Tonndorf, and Jack Vernon. It was an international group of experts from many fields, a group that included scientists, clinicians, and the like. Approximately 400 people attended the meeting. We promised that we would organize the Second International Tinnitus Seminar in 1983. And so it was that, in 1983 in New York, scientists, clinicians, and others interested in tinnitus met. This time there were many exciting studies reported, many of which had their roots in the 1979 meeting.

We must give Abe credit for single-handedly transforming the study of tinnitus throughout the world; there is no disputing this fact. The Third International Tinnitus Seminar took place in 1987 in Münster, Germany; the Fourth International Tinnitus Seminar took place in 1992 in Bordeaux, France; the Fifth International Tinnitus Seminar took place in Oregon, United States, in 1997; and the Sixth International Tinnitus Seminar is scheduled for 1999 in England.

In 1983, Abe met up with Claus Claussen in New Orleans through Wally Rubin. In 1984, Abe became a member of the Neurootological and Equilibriometric Society and paid his first visit to Bad Kissingen. Since that time, Abe and Claus have cooperated in many collaborative efforts to benefit the tinnitus patient, including the *International Tinnitus Journal*. Theirs is a professional relationship based on mutual respect as well as a friendship that continues to grow.

Since the First International Tinnitus Seminar, Abe's contributions have been so numerous that I shall only highlight them. These include publication of a landmark textbook, the first devoted to tinnitus, entitled Tinnitus: Diagnosis and Treatment in 1991, which is now going into its second edition; the driving force behind the International Tinnitus Journal, of which Abe is a coeditor along with Claus Claussen and myself, the first peer-reviewed journal devoted to tinnitus since 1994, sponsored by the Martha Entenmann Tinnitus Research Center and the 4-G-Forschung and now the official journal of the Neurootological and Equilibriometric Society; author of more than 150 scientific publications and presentations primarily focused on tinnitus; and the report of the final common pathway for tinnitus in 1990. His naming of the discipline devoted to the study of tinnitus as tinnitology. (I must admit that, in the beginning, I hated this name and always smiled at hearing it; however, even I will acknowledge that it is a correct description of the field that we are all studying and in which we are still working.)

Abe's awards and honors are too numerous to mention; some highlights include first chairman of the International Tinnitus Study Group; guest of honor at the Third International Tinnitus Seminar, University of Münster, Germany; guest of honor at the International Symposium on Tinnitus Diagnosis and Treatment, University of Barcelona, Spain; recipient of the Hocks Award from the American Tinnitus Association; Bailles de LaLande de Pomerol at the Fourth International Tinnitus Seminar, Bordeaux, France; symposia honor as Professor Emeritus, Clinical Otolaryngology, State University of New York Health Science Center at Brooklyn; recipient of the Myrtle Reed Award, Hadassah Zion Organization of America; recipient of an Excellence in Teaching award while on resident staff in the Department of Otolaryngology, Kings County Hospital, New York; member of the American Tinnitus Association, Scientific Advisory Board, USA—and the list just continues and continues.

In 1987, the Lionel Hampton Ear Research Foundation was formed and Abe was appointed director. This organization was the initial sponsor of education in research activities for tinnitus in which we have been involved.

Through the generosity of Mr. Robert Entenmann, in 1995 the Martha Entenmann Tinnitus Research Center, Inc., became a reality, with Abe as director. The Martha Entenmann Tinnitus Research Center has provided us with a forum in which to develop and expand clinical research goals highlighted by an attempt to improve the accuracy of tinnitus diagnosis, a neuropharmacology for tinnitus, and an operative procedure for a primarily cochlear-type tinnitus, and in which to establish the *International Tinnitus Journal*. In 1997, the Center sponsored the First International Tinnitus Think Tank, New York, with 12 of the world's most renowned clinicians, scientists, and researchers participating in focusing on the neurochemistry of tinnitus.

Under the sponsorship of the Martha Entenmann Tinnitus Research Center, collaborations exist with 13 investigators in three countries. Abe is extremely proud of the collaborations that continue at this time with Arnold M. Strashun, chief of the department of nuclear medicine of State University of New York Health Science Center at Brooklyn, for single-photon emission computed tomography investigation of brain in patients with tinnitus, for both diagnosis and treatment monitoring; with Professors A. Stracher and Richard Salvi for investigation of calpain antagonists for noise protection and tinnitus control; with Ellis Douek in England in electrical stimulation; with M. Miles Goldsmith in Georgia, USA, in electrical stimulation and tinnitus control; with Richard Nodar for audiology and development of the second edition of our text, Tinnitus: Diagnosis and Treatment; with Professor Claussen and his associates in Germany for adaptation of the vestibular evoked response for understanding the symptom of tinnitus; with Dudley Weider from Dartmouth University, USA, for surgery and tinnitus control; and with William House, USA, for the All-Hear cochlear implant and the development of an investigation device exemption for adaptation of the single-channel cochlear implant for tinnitus suppression.

Abe has no shortage of ideas; his only limitation is that there are but 24 hours in a day. He is always interested in learning new concepts and new ideas and is capable of taking this knowledge and integrating it for furthering our understanding of tinnitus and for translating this into practical application for helping the tinnitus patientalways with the eventual goal of finding a cure for tinnitus.

It is only appropriate that Abe Shulman be honored today at this special meeting, for his major contributions to the field of tinnitology. And now I would like to introduce my friend and colleague, Dr. Abraham Shulman, not only the grandfather of tinnitology but the grandfather of Olivia Ann Goldring, his pride and joy.