Edmund Prince Fowler Award for Basic Science

It says something about the intellectual wealth of the Triological Society that Edmund Prince Fowler, Sr., MD, succeeded Max Goldstein, MD, as president in 1932. Both were giants in otology, prolific authors and advocates for the hard of hearing. In honor of Dr. Fowler's contributions to otolaryngology, the Society established The Edmund Prince Fowler Award in 1971, given each year for the best thesis in basic research.

After earning his MD from Columbia University, Dr. Fowler joined the Manhattan Eye and Ear Hospital and became a clinical professor at Columbia University in 1933. He was a decorated colonel of World War I. He was president of the American Otological Society in 1937, recipient of the first Award of Merit from that society in 1952 and founder of the first hearing center in the United States (in New York City). To the legacy of the prodigious researcher and "Dean of Audiology", as he was called, we attribute the invention of the modern clinical audiometer. He tested many patients and soon became aware of the fact that some patients with severe or unilateral losses had suprathreshold hearing values, a condition he coined as "recruitment". This clinical finding resulted in the Alternate Binaural Loudness Balance test, the first to separate cochlear from retrocochlear losses.

In his address to the sections in January 1932, Dr. Fowler described specific recommendations for hearing tests on schoolchildren. He also asked his colleagues to be thoughtful: "Let us not forget to treat the patient as a sensitive human being," he said, "and aid him in surmounting the drawbacks and psychological reactions to his disability."

At the 38th Annual Meeting in Atlantic City, NJ, in 1932, Dr. Fowler shared the spotlight with Edward B. Dench, MD, first president of the Triological, then 72 years old. (Dr. Dench had been named Honorary President of the Society in 1931 until his death in 1936.) At the meeting George Richards, MD, editor of the Transactions, outlined a list of guidelines for submissions. During the same meeting the council approved a resolution supporting the ABO and its work in raising educational standards in the specialty as part of an effort to stem the tide of proposals for examinations for specialists by each of the 48 states.

Dr. Fowler died in 1966, six months after the last of his 113 papers was presented (at 94 years of age!) at a meeting of the American Otological Society.

This honor was created to perpetuate the ideals of the great teacher for whom it was named and to bestow upon a worthy recipient the responsibility of furthering the highest standards of perfection in the study, teaching and practice of Otolaryngology.

Please see the list of award winners on the following pages.

The Triological Society
UPHOLDING THE NOBLE LEGACY

Year	Edmund Prince Fowler Award for Basic Science
1971	**Richard R. Gacek, MD** The Vestibuloocular Pathways in the Cat
1972	**Duane W. Nagle, MD** Method for Establishing Electronystagmograms for Normal Humans Subjected to Caloric Stimulation **Raimund G. Rueger, MD** title unknown
1973	**Robert J. Ruben, MD** Development and Cell Kinetics of the Kreisler Mouse
1974	**Robert I. Kohut, MD** title unknown **Willard B. Moran Jr., MD** title unknown **Gershon J. Spector, MD** The Electron Transport System in the Cochlear Hair Cell
1975	**Gregory J. Matz, MD FACS** The Ototoxic Effects of Ethacrynic Acid in Man and Animals **Richard L. Voorhees, MD FACS** title unknown
1976	**Shokri Radpour, MD FACS** Organization of the Facial Nerve Nucleus in the Cat
1977	**LaVonne Bergstrom, MD** Osteogenesis Imperfecta: Otologic and Maxillo Facial Aspects
1978	**Diran O. Mikaelian, MD** Development and Degeneration of Hearing in the C57/b16 Mouse

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1979	**William L. Meyerhoff, MD** Hypothyroidism and the Ear **Clarence T. Sasaki, MD FACS** The Development of Laryngeal Function: Etiologic Significance in the Sudden Infant Death Syndrome
1980	**Robert A. Schindler, MD** The Ultrastructure of the Endolymphatic Sac in Man
1981	**Don E. Gebhart, MD** Tympanostomy Tubes in the Otitis Media Prone Child
1982	**Michael M.E. Johns, MD** The Clonal Assay of Head and Neck Tumor Cells: Results and Clinical Correlations
1983	**Bruce W. Jafek, MD FACS** Ultrastructure of Human Nasal Mucosa
1984	**David E. Schuller, MD FACS** An Assessment of Neck Node Immunoreactivity in Head and Neck Cancer
1985	**Marvin P. Fried, MD FACS** The Effects of Radiation Therapy on Microvascular Anastomoses
1986	**Michael Friedman, MD FACS** Factors Influencing Parathyroid Allotransplantation in Rats
1987	**Stanley M. Shapshay, MD FACS** Laser Applications in the Trachea and Bronchi: A Comparative Study of Soft Tissue Effects Using Contact and Noncontact Delivery Systems
1988	**Timothy T. K. Jung, MD PhD** Prostaglandins, Leukotrienes and Other Arachidonic Acid Metabolites in the Pathogenesis of Otitis Media
1989	**Robert T. Sataloff, MD DMA FACS** Embryology of the Facial Nerve and Its Clinical Applications

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1990	**Soly Baredes, MD FACS** Blood Flow of an Experimental Head and Neck Carcinoma
1991	**Douglas E. Mattox, MD** Central Nervous System Changes Associated with Noise-Induced Hearing Loss: An Electron Microscopic and Freeze-Fracture Study of the Chick Nucleus Magnocellularis
1992	**Vanessa G. Schweitzer, MD FACS** Cisplatin Induced Ototoxicity: The Effect of Pigmentation on Inhibitory Agents
1993	**Ralph F. Wetmore, MD FACS** The Effects of Acid Upon the Larynx of the Maturing Rabbit and Its Possible Significance to the Sudden Infant Death Syndrome
1994	**Paul R. Lambert, MD FACS** Inner Ear Hair Cell Regeneration in a Mammal: Identification of a Triggering Mechanism
1995	**Michael F. Pratt, MD FACS** Evaluation of Random Skin Flap Survival in a Porcine Model
1996	**P. Ashley Wackym, MD FACS FAAP** Molecular Temporal Bone Pathology
1997	**Allen D. Hillel, MD FACS** Study of Laryngeal Muscle Activity in Normal Human Subjects and in Patients with Laryngeal Dystonia Using Multiple Fine-Wire Electromyography **D. Bradley Welling, MD PhD FACS** Clinical Manifestations of Mutations in the Neurofibromatosis Type 2 Gene in Vestibular Schwannomas (Acoustic Neuromas)
1998	**No award**
1999	**Debara L. Tucci, MD FACS** Conductive Hearing Loss Results in a Decrease in Central Auditory System Activity in the Gerbil

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2000	**Rick A. Friedman, MD PhD** A Transgenic Insertional Inner Ear Mutation on Mouse Chromosome 1 **Michael D. Seidman, MD FACS** The Effects of Dietary Restrictions and Antioxidants on Presbyacusis
2001	**James C. Post, MD PhD MSS FACS** Direct Evidence of Bacterial Biofilms in Otitis Media
2002	**Richard D. Kopke, MD FACS** Enhancing Intrinsic Cochlear Stress Defenses to Reduce Noise-Induced Hearing Loss
2003	**Chung-Ku Rhee, MD FACS** Platelet-Activating Factor-Induced Hearing Loss Medicated by Nitric Oxide
2004	**Shawn D. Newlands, MD PhD MBA FACS** Relationship of Static and Dynamic Mechanisms in Vestibular Compensation
2005	**Steven W. Cheung, MD FACS** Frequency Map Variations in Squirrel Monkey Primary Auditory Cortex
2006	**Alan G. Micco, MD FACS** Electrical Resistivity Measurements in the Mammalian Cochlea after Neural Degeneration
2007	**Bradley W. Kesser, MD** An In Vitro Model System to Study Gene Transfer in the Human Inner Ear
2008	**Eric M. Genden, MD FACS** The Basic Science of Tracheal Transplantation: Cytokine Expression in the Murine Tracheal Transplantation Model **Marlan R. Hansen, MD** Effects of Erb B2 Signaling on Response of Vestibular Schwannoma Cell y-Irradiation

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2009	**Ravindhra G. Elluru, MD PhD FACS** Fibroblast Growth Factor 18 Provides Directional and Proliferative Cues to Developing Upper Respiratory Tract Cartilage **Andrew P. Lane, MD** Chronic Rhinosinusitis-Associated Olfactory Loss: Creation of an Animal Model
2010	**Philip D. Littlefield, MD** Laser Stimulation of Single Auditory Nerve Fibers
2011	**Stacey L. Halum, MD** Neurotrophic Factor-Secreting Autologous Muscle Stem Cell Therapies for the Treatment of Laryngeal Denervation Injury
2012	**Quyen T. Nguyen, MD PhD** Surgery with Molecular Navigation Using Fluorescently Labeled Injectable Systemic Probes
2013	**Subinoy Das, MD FACS** Improving Patient Care via a Protein Based Diagnostic Test for Microbe Specific Detection of Chronic Rhinosinusitis
2014	**Hinrich Staecker, MD PhD** Optimizing atoh1 Induced Vestibular Hair Cell Regeneration
2015	**Bradford A. Woodworth, MD** Resveratrol Ameliorates Abnormalities of Fluid and Electrolyte Secretion in a Hypoxia-Induced Model of Acquired CFTR Deficiency
2016	**Gregory A. Grillone, MD FACS** The Color of Cancer: Margin Guidance for Oral Cancer Resection Using Elastic Scattering Spectroscopy (ESS)
2017	**Syed F. Ahsan, MD FACS** An Animal Model of Deep Brain Stimulation (DBS) for Treating Tinnitus - A Proof of Concept Study
2018	**Murugappan Ramanathan, MD FACS** Disruption of Sinonasal Epithelial Nrf2 Enhances Susceptibility to Rhinosinusitis in a Mouse Model

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2019	**Amber U. Luong, MD PhD FACS** Aspergillus Fumigatus Induction of IL-33 Expression in Chronic Rhinosinusitis with Nasal Polyps is Protease Activated Receptor 2-Dependent
2020	**Alexander Gelbard, MD** The Proximal Airway is a Reservoir for Adaptive Immunologic Memory in idiopathic Subglottic Stenosis
2021	**Adam J. Luginbuhl, MD** The Synthetic Triterpenoid RTA-408 Limits Radiation Damage to Normal Tissue, Enhancing Vascular Integrity, and Improves Post-Irradiation Surgical Outcomes
2022	**Steven J. Eliades, MD PhD** Effects of Cortical Stimulation on Feedback Dependent Vocal Control in Non-Human Primates
2023	**Thomas J. Ow, MD MS FACS** Capturing the Diversity of Head and Neck Squamous Cell Carcinoma Using Conditional Reprogramming Cell Culture Methods
2024	**Devyani Lal, MD MBBS MS** Multi-Omics Study of Chronic Rhinosinusitis via Joint Dimensional Reduction Analysis of DNA Methylation, mRNA and Cytokine Expression Reveals Novel Insights into the Pathogenesis
2025	**Lauren T. Roland, MD MSCI** The Role of Proteases in Epithelial Dysregulation in Invasive Fungal Sinusitis