

---

**INGEBORG J. HOCHMAIR, PH.D.**

HEARING RESTORATION VIA COCHLEAR IMPLANTS:  
ACHIEVEMENTS AND FUTURE CHALLENGES  
FOR ENGINEERING AND RESEARCH

---

OCTOBER 8, 2015

4:00 P.M.

208 LIGHT HALL

Upcoming Discovery Lecture:

**ELAZER R. EDELMAN, M.D., PH.D.**

*Thomas D. and Virginia W. Cabot Professor of Health Sciences and Technology, MI*

*Nov. 5, 2015*

*208 Light Hall / 4:00 P.M.*

SPONSORED BY:  
VANDERBILT BILL WILKERSON CENTER  
DEPARTMENT OF OTOLARYNGOLOGY

## HEARING RESTORATION VIA COCHLEAR IMPLANTS: ACHIEVEMENTS AND FUTURE CHALLENGES FOR ENGINEERING AND RESEARCH

---

At present more than 400.000 people of all ages around the globe are using one or two cochlear implants every day to hear and to communicate. Deaf born children implanted as babies in the mid-nineties, when the CI had become suitable for widespread clinical use, are now young adults; hearing via cochlear implants is natural to them.

Having had the privilege of working in this field for a long time, in research early on as well as starting and growing a company turning research results into devices I could observe as well as trigger an impressive ever growing amount of research around the CI being conducted in various disciplines.

A research overview will be presented comprising basic and applied research to develop even more effective future treatments for the current and for new and better hearing patient groups, pursuing goals like predictable natural hearing very close to normal for every individual case, making the procedure reversible, preventing further progression of hearing loss, or even re-growing excitable neural structures.

---



### **INGEBORG J. HOCHMAIR, PH.D.**

VIENNA UNIVERSITY OF TECHNOLOGY,  
INNSBRUCK UNIVERSITY OF MEDICINE  
CEO AND CTO OF MED EL CORPORATION  
RECEIPIENT, LASKER-DEBAKEY CLINICAL  
MEDICAL RESEARCH AWARD

---

Ingeborg Hochmair is CEO and CTO of the hearing implant company MED-EL, now present in 106 countries and employing 1500 people, which she had co-founded with Erwin Hochmair 25 years ago.

Ingeborg studied EE at Vienna Technical University. After graduating in 1975, she started work on the development of the first microelectronic multichannel Cochlear Implant together with her later husband Prof. Erwin Hochmair at the Institute for General Electrical Engineering and Electronics at TU Vienna, and received her Dr.techn degree there. The first implantations took place in 1977 and 1978. After a research stay at Stanford University, California, she started working and lecturing on Biomedical Engineering at the University of Innsbruck.

Ingeborg Hochmair has published more than 100 papers and is the inventor or co-inventor of over 40 patents and patent applications. She has been awarded a number of prizes for her scientific achievements, such as the Holzer Award (1979), the Leonardo da Vinci Award (1980) and the Sandoz Award (1984). In 1995, she won the Business Woman of the Year Award (Prix Veuve Clicquot) and, the following year, was awarded the Wilhelm Exner Medal. In 2004, Ingeborg Hochmair was granted an honorary doctorate by the faculty of medicine at Munich University of Technology and in 2010 she received an honorary doctorate from Innsbruck University of Medicine.

In 2013, Ingeborg Hochmair was awarded the Lasker-DeBakey Clinical Medical Research Award for the development of the modern cochlear implant. For this achievement she and her husband were also honoured with the Fritz J. und Dolores H. Russ Prize 2015.

---