In this session we celebrate the development of the modern cochlear implant and some of the many individuals who made this technology possible. The individuals below have been awarded either the Lasker-DeBakey Prize, the Russ Prize or both, for their work.

Acoustical Society of America Special Session, May 19, 2015

Celebrating the Modern Cochlear Implant and the First Substantial Restoration of a Human Sense Using a Medical Intervention

Morning Session 2aPP

8:35-8:55 From W. House to the present: A brief history of cochlear implants. M. Dorman

8:55-9:15 The punctuation mark in an equilibrium state: Modern signal processing. B. Wilson

9:15-9:35 Additions to a single CI to improve speech understanding. R. Gifford et al.

9:35-9:55 Inserting the speech signal above the cochlea: How can this work? C. McKay

9:55-10:15 Neuroplasticity in deafness: Evidence from studies of patients with cochlear implants. A. Sharma

10:15-10:35 Language emergence in early implanted children. A. Geers

10:35-10:50 Coffee break

10:50-11:10 Pitch perception and representations of frequency in the peripheral auditory system: What is missing in cochlear implants? A. Oxenham

11:10-11:30 The sound of a cochlear implant: Lessons learned from unilaterally deaf patients fit with a cochlear implant. M. Dorman

Afternoon Session 2pPP

1:00-1:20 Lessons learned from CIs that are relevant to a visual prosthesis. J. Patrick

1:20-1:40 Lessons learned from CIs that are relevant to a vestibular prosthesis. J. Rubinstein

1:40-2:00 Neuroplasticity with cochlear implants: Underlying neuronal mechanisms. A. Kral

2:00-2:20 Longitudinal Results in the Childhood Development after Cochlear Implantation Study J. Niparko

2:20-2:40 Importance of cochlear health for cochlear implant function. B. Pfingst

2:40-2:55 Coffee Break

2:55-3:15 Engineering contributions to the development of the cochlear implant. F-G Zeng

3:15-3:35 Anatomical considerations for the design and applications of cochlear implants. H. Rask-Andersen

3:35-3:55 Tissue engineering and pharmaceutical interventions. J. Miller