Auditory Development: From Cochlea to Cognition

Registration and talks: Kane Hall, Room 220

Posters: Mary Gates Hall Commons

DAY 1: 14 AUGUST 2015

8:30 am Registration (Coffee and continental breakfast)

DAY 1: MORNING SESSION (Chair: Allison Coffin)

9:00 am Welcome

Neal Futran, Professor and Chair, Department of Otolaryngology-HNS Richard Folsom, Professor, Department of Speech and Hearing Sciences

9:10 am Carolina Abdala (University of Southern California)

Development of human cochlear function: known unknowns

9:40 am Matthew Kelley (NIDCD)

Transcriptional profiling of hair cell development by single cell RNA-Seq

10:10 am Isabelle Roux (Johns Hopkins School of Medicine)

α1 nAChR expression in the inner hair cells parallels the onset of cholinergic efferent synaptic function but is not necessary for efferent

synapse formation

10:30 am Chandrakala Puligilla (Medical University of South Carolina)

MEKK4 signaling regulates sensory cell development and function in the

mouse inner ear

10:50 am Hanna Sherrill (NIDCD)

Expression of Pou4f1 defines a potential subtype of spiral ganglion

neurons

11:10 am Discussion session 1: Development of auditory periphery: similarities and

differences amongst the species we study

11:40 am-1:30 pm Poster session & buffet lunch

DAY 1: AFTERNOON SESSION (Chair: Carolina Abdala)

2:00 pm	Robin I	Javis	(Rutgers	University)
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Older and Wiser: Development of dynamic plasticity in the spiral ganglion

2:30 pm Karl Kandler: (University of Pittsburgh)

Role of pre-hearing activity in the refinement of a tonotopic map

3:00 pm Stephanie Altieri (University of Pittsburgh)

En1 is necessary for the differentiation, survival and migration of superior

olivary complex neurons

3:20 pm COFFEE BREAK

3:40 pm Yuan Wang (Florida State University)

Afferent influence of neuronal dendrites of bipolar neurons: structural

regulation and molecular mechanism

4:00 pm <u>Discussion session 2</u>: Relationship between functional development of the

cochlea and the CNS

4:30-6:00 pm Poster session & reception

DAY 2: 15 AUGUST 2015

9:00 am Coffee and continental breakfast

DAY 2: MORNING SESSION (Chair: Dan Sanes)

9:30 am Welcome

Jay Rubinstein, Professor and Director, Virginia Merrill Bloedel Hearing

Research Center

9:35 am Emily Buss (University of North Carolina)

Factors responsible for immature auditory performance in children

10:05 am David Horn (University of Washington)

Spectral Ripple Discrimination in Normal Hearing and Cochlear Implanted

Infants

10:25 am Laurianne Cabrera (Université Paris Descartes)

How do newborns perceive speech sounds? The use of speech temporal

cues in phonetic perception at birth

10:45 am Julia Huyck (Kent State University)

Neuropsychological correlates of naïve comprehension of and rapid learning of noise-vocoded speech during adolescence and adulthood

11:05 am Anne Takesian (Harvard Medical School)

Top-down gating of auditory thalamocortical plasticity

11:25 pm Brian Monson (Harvard Medical School)

Maturation of Auditory Cortical Microstructure in Preterm Infants

12:00-2:00 pm Poster session & buffet lunch

DAY 2: AFTERNOON SESSION (Chair: Lynne Werner)

2:00 pm Sarah Bottjer (University of Southern California)

Neural representations of current and goal behaviors during sensitive-

period learning

2:30 pm Janet Werker: (University of British Columbia)

Visual and motor influences on auditory speech perception in infancy

3:00 pm Chistina Zhao (University of Washington)

Musical intervention enhances infants' neural processing of temporal

structure in music and speech

3:20 COFFEE BREAK

3:40 pm Christina Vanden Bosch der Nederlanden (Univ Nevada at Las Vegas)

Category knowledge can affect children's ability to detect changes in

common sounds

4:00 pm Edwin Rubel (University of Washington)

Hearing Development in broad strokes, 1971 - 2015 and beyond: Where

were we, what do we know now, what are the challenges?

4:50-5:30 pm Reception

Sponsors

- We gratefully acknowledge financial support from:
 * National Institute of Deafness and Other Communication Disorders

- * Company of Biologists

 * Association for Research in Otolaryngology

 * Department of Speech and Hearing Sciences, University of Washington

 * Department of Otolaryngology, University of Washington

 * Virginia Merrill Bloedel Hearing Research Center

- * Med-el

Registration and Talks Posters and Receptions

Kane Hall, Room 220 Mary Gates Hall Commons

