

The Human Brain: Genes, Development, and Connections in the 21st Century

A Symposium jointly sponsored by
the Cajal Club, the Allen Institute for Brain Science,
and the Seattle Children's Research Institute

Wednesday, October 27, 2010
Seattle Children's Research Institute (1900 Ninth Avenue)

Tuesday, October 26, 2010

7 pm—Reception hosted by the Allen Institute for Brain Science (at the Allen Institute, restricted to registrants, capacity is limited)

Wednesday, October 27, 2010 (All sessions to be held at the Seattle Children's Research Institute - SCRI)

Morning:

8:30 Session 1—Genes and Development (Chaired by John Rubenstein)

- 8:30-8:45 Symposium Introductions (John Rubenstein CC; John Hohmann, Allen Institute; Dr. Nino Ramirez, SCRI)
- 8:45-9:15 Daniel Geschwind (UCLA): *Systems biology, transcriptomics, and human brain evolution*
- 9:15-9:45 Robert Hevner (SCRI): *From protomap to map: genes that implement regional identity in postmitotic cortical neurons*
- 9:45-10:15 Arturo Alvarez-Buylla (UCSF): *Specification of postnatal neural stem cells*

Coffee Break

10:30 Session 2—Neurons and Connections (Chaired by Charles Ribak)

- 10:30-11:00 Clifford Saper (Harvard): *Clocks in the brain: staying awake for dinner*
- 11:00-11:30 Patrick Hof (Mount Sinai): *A case study in large brain evolution, the von Economo neuron: cytology, markers, phylogeny, and some function*
- 11:30-12:00 Ed Lein (Allen Institute): *Molecular anatomy of the neocortex and hippocampus from mice to primates*

Lunch & Poster Session

Afternoon:

1:30 Session 3—Atlasing and Informatics (Chaired by John Hohmann)

- 1:30-2:00 David van Essen (WUSL): *Exploring the human connectome using non-invasive neuroimaging*
- 2:00-2:30 Christof Koch (Caltech): *From grandmother to Jennifer Aniston: linking perception to single neurons*

- 2:30-3:00 Allan Jones (Allen Institute): *Mapping gene expression in the CNS: tools and data from the Allen Institute for Brain Science*

Coffee Break

4:00 Session 4—Awards and Lectures (Chaired by Larry Swanson & Edward Jones)

- 4:00-4:45 Pinckney J. Harman Memorial Lecture: Arnold Kriegstein (UCSF): *Building a bigger brain: a novel neural stem cell in the developing human cortex*
- 4:45-5:30 Wendell J.S. Krieg Lifetime Achievement Award: Pasko Rakic (Yale): *Development and evolution of cerebral cortex and the ascent of humans*

[Guided tours of the SCRI Center for Integrative Brain Research will be available immediately after the last lecture.]

Cajal Club Board Dinner (by invitation)

- 7:00 pm: Highlighted by special Wendell J.S. Krieg Lifetime Achievement Award to philanthropist Paul G. Allen