1. Dr. Helen J. Neville (bdl.purpled.com/Personnel/people.php?page=people_staff&people=helen) is a scientist of the finest caliber. She was born in Vancouver, British Columbia, where she did her undergraduate work, and received her Ph.D. in neuroscience at Cornell University. Her professional career began in San Diego, where she was Director of the Laboratory for Neuropsychology at the Salk Institute, and a professor in the Department of Cognitive Science at the University of California, San Diego.

   She is currently The Robert and Beverly Lewis Endowed Chair and Professor of Psychology and Neuroscience, Director of the Brain Development Lab, and Director of the Center for Cognitive Neuroscience at the University of Oregon in Eugene. Her work is well published in major scientific journals such as *Nature*, *Nature Neuroscience* and the *Journal of Cognitive Neuroscience*.

   She runs a productive and humane lab. As filmmakers, the devotion and hard work of the staff and graduate students impressed us. http://bdl.uoregon.edu.

2. Students will be interested to know that the maturation of the brain is not complete until the early twenties. There are legal and social implications of this, some hotly debated. Former Duke University professor Aaron White's illustrated PowerPoint about the effect of alcohol on adolescent brains gives a nice overview. It is available at www.winmalee-h.schools.nsw.edu.au/htm/info/documents/D&A/TeenBrainOnAlcohol_A.White.pdf. He is now a part of the NIAAA (National Institute on Alcohol Abuse and Alcoholism). The website is: www.niaaa.nih.gov.

3. ***Dorsal and ventral pathways***. Students may be surprised that there are essentially three pathways for vision processing. One system (shown from above in the film) links the eyes and the visual cortex, but the two others—the ventral and dorsal pathways—go from the visual cortex to the temporal lobe (ventral pathway), and the parietal region of the brain (dorsal).

4. With her interest in plasticity, Dr. Neville has also studied the differences between people who have had American Sign Language as their first language from birth (both deaf people and hearing offspring of deaf people) and those who acquire ASL later in life. Her article on the subject can be found at http://www.nature.com/neuro/journal/v5/n1/full/nn775.html.

5. ***Attention***. Dr. Michael Posner, who is now an emeritus professor at the University of Oregon, Dr. Neville's current location, has studied this extensively and written books and articles on the subject. A description of some of his work is at www.apa.org/monitor/oct03/young.html.

Other websites of interest:

- ***Brain information***: www.thebrain.mcgill.ca/flash/index_a.html. This is a wonderful site where you can choose topics by type (social, psychological, neurological, cellular, or molecular) and your level of familiarity (beginning, intermediate, or advanced). The section on language centers in the brain is especially well done.
- Brain imaging: http://www.loni.ucla.edu/~thompson/thompson.html. Wonderful computer enhanced images of the brain including those that show development.
- Dr. Neville's lab has made a video for parents and children available through http://changingbrains.org.

Related Films Also Available from Davidson Films

This is one of four films in Davidson Films' "Neuroscience" series. The other titles are:

- ***Discovering the Human Brain: New Pathways to Neuroscience*** (2006) 29 Minutes
- ***Making Sense of Sensory Information*** (2008) 30 Minutes
- ***The Emotional Brain: An Introduction to Affective Neuroscience*** (2009) 33 Minutes

Another related film is:

- ***Building Literacy Competencies in Early Childhood*** (1996) 31 Minutes