Summary of 8 December 2009 Workshop Meeting:
Paula Wolk, M.D. discussed: *Have we found a neural correlate of Vertical Splitting?* A FMRI study of switching in a patient with DID.

Dr. Wolk reviewed the history of the concept of vertical splitting and dissociation. She then emphasized that for her group's present purposes they were using the term in the restricted sense as defined by the 2004 Textbook of Psychoanalysis i.e.:

The separating off of two or more mental states within an individual so that the individual is unaware of one state while he or she is in the other. Often the result of psychic TRAUMA, it may allow the individual to maintain allegiance to two contradictory truths, while not being conscious of the contradiction. An extreme manifestation of dissociation is multiple personality, in which a person may exhibit several independent personalities, each unaware of the others. (p. 550)

She then described the patient with whom she has worked for more than twenty years and who has been the subject for a series of FMRI studies. This patient meets DSM IV criteria for Dissociative Identity Disorder. The first set of studies looked at the neural correlates of the switching process. Dr. Wolk and Dr. Savoy reviewed the study methodology and results, as they were reported in a poster at the June 2009 annual meeting of the Organization for Human Brain Mapping. The result of most interest to Dr. Wolk was the consistent activation in the *nucleus accumbens* during the switching process. This activity was\ seen in both directions of personality switch: from the patient's "Adult" personality (Ap) to her "Child" personality (Cp), and from her Cp to Ap. Further, these results were seen independently in two sets of data, collected on two separate days of scanning, conducted several weeks apart.

Dr. Wolk then went on to discuss the possible implications of these findings, including:

1) the possibility that the nucleus accumbens will be found to play a central role in dissociation in general and not just for this patient; and
2) the possibility of distinguishing the neural correlates of repression from those of dissociation, with some speculation about the pathways involved for each.

This group is also looking at data collected while the subject was at rest (in each of her personalities) to measure the activity in the Default State Network of each personality, and hopes to be able to report on the results shortly. The group next wants to look at each personality's response to stimuli for which only one part has autobiographical memory. Dr. Wolk then showed some of the artwork produced by the Cp which may be used as stimuli for some of these subsequent studies.

A general and far reaching discussion ensued in which Dr. Savoy was able to clarify various aspects of FMRI methodology.