# Trauma in Contemporary Clinical Practice II (The Whitefish, Montana Lecture, 1998)

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## Memory and Trauma -- I

- In prospective studies, a significant proportion of subjects with documented sexual abuse in childhood did not remember the abuse during young adulthood (Herman & Schatzow, 1987; Briere & Conte, 1993).
- 31% of sexually abused women treated for substance abuse reported at least partial forgetting of the abuse (Loftus et al., 1994)

#### Memory and Trauma -- II

- Possibility of delayed recall -- the earlier the childhood trauma, the more likely to forget and subsequently recover a memory (Loftus & Pickrell, 1995).
- "Misinformation effect" = incorrect information is incorporated in the later reports of events (Williams & Banyard, 1997). This is NOT the same as believing that an entire new event occurred.

## Memory and Trauma -- III

- Possible mechanisms that explain the "forgetting" of traumatic events:
  - 1) failure to encode; 2) dissociation;
  - 3) simple forgetting over time;
  - 4) repression; 5) conditioned extinction (experimental); 6) state dependent learning; 7) long-term depression (neuronal inhibition of transmission of data).

# Memory and Trauma -- IV (Neurobiology)

- Enhancing of memories: Stress hormones and neuromodulators facilitate memory formation (Cahill & McGaugh, 1996,1997).
- Extinguishing of memories, e.g., Transient Global Amnesia (TGA) -- lasting 4-6 hours, often occurring after stressful events. Mechanisms: stress -- glutamate --hippocampal depolarization -- hypoperfusion (Hodges, 1998).

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