## 3. Preclinical Studies Leading to Treatment

- Originally proposed 17 basic neuroscience projects to aggressively explore the intracellular mechanisms by which GW chemicals damage brain cells to cause chronic illnesses.
- These projects were the last to be processed through the contracting process and only began in the last quarter of 2008.
- No results obtained yet

## 3. Preclinical Studies Leading to Treatment

- Studies funded by VA 10
- Studies to be submitted to VA soon − 1
- Studies to be re-reviewed by MRG 2
- Studies presently on hold or withdrawn (W/D) 5

## 3. Preclinical Studies Leading to Treatment

- 5.0 Effects of OPs on behavior and clinical/neuroimaging parameters (VA)
- 5.1 Effects of OPs/vaccines on the immunologic system (W/D)
- 5.2 Fate of OP-protein conjugates by proteomic analysis (MRG)
- 5.3 Effects of OPs on phosphorylation signaling in striatum
- 5.4 Effects of OPs on plasticity of cholinergic signaling
- 5.5 Effects of OPs on calcium signaling in mitochondria
- 5.7 Effects of OPs on neuro-inflammation and NF-kB activation
- 5.8 Effects of OPs on neuro-inflammation and cytotoxicity
- 5.9 Effects of OPs on neuronal and mitochondrial physiology
- 5.10 Role of Klotho in Neurotoxicity (On hold)

## 3. Preclinical Studies Leading to Treatment Funded Projects

- 5.11 Role of the xenobiotic nuclear hormone receptor PXR (On hold)
- 5.12 Effects of OPs on hippocampal cognitive function in mice
- 5.13 Effects of OPs on a mouse model of Motor Neuron Disease
- 5.14 Effects of OPs on a mouse model of Glioblastoma brain cancer
- 5.15 Effects of OPS on autonomic nervous system function
- 5.16 Effects of parental OP exposure on brain development of fetus (MRG)
- 5.17 Effects of OPs on fear conditioning (On hold)